



ROCKLAND TOMORROW: Rockland County Comprehensive Plan

Adopted March 1, 2011

ROCKLAND TOMORROW
ROCKLAND COUNTY COMPREHENSIVE PLAN
Rockland County, New York

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Rockland County Executive

Hon. Harriet D. Cornell
Chair of the Rockland County Legislature

Prepared with the assistance of:
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Adopted March 1, 2011

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1.0 INTRODUCTION: PLAN VISION AND GOALS

Rockland County is in many respects both a maturing suburb and a dynamic one. Rockland has been culturally enriched by the influx of residents from other countries and has always sought to meet the challenge of providing needed services for all its residents. The 21st Century has also brought greater comprehension of the need to protect and conserve natural resources. Young people are leading the way in seeking alternate forms of energy, clean air, clean water, and a “greener” approach to life.

Planning for the future requires that we give forethought to land use, job creation and retention, transportation, housing, physical and visual access to the Hudson River, replacement of aging infrastructure, business growth, revitalization of older village and hamlet centers, protection of critical environmental areas, and conservation of natural resources, as well as the mapping of streams and roads. Resources, once lost through unplanned development, may never be retrieved.

Faced with these issues, in April 2006, the Rockland County Legislature approved legislation to start the process of developing a comprehensive plan that would provide guidance for future municipal planning and zoning actions and serve as the basis for all County government planning and development issues. It would identify goals, principles, policies, and guidelines for the immediate and long-range protection, enhancement, growth, and development of Rockland County.

The Rockland County Legislature and the County Executive undertook the crafting of a new Comprehensive Plan in order to address the redevelopment pressures and demographic changes that may fundamentally alter the character of the county. Foreseeable improvements to the I-287 Corridor, as well as other major potential regional transportation projects, will produce great redevelopment pressures within the county, just as the building of the New York State Thruway did over 50 years ago. The changing demographics of the county – especially that of the greatly increased elderly population – will increase the need for eldercare in the county. Intertwined with these changes are the issues of economic development, infrastructure needs and capacity, open space and other natural resources, as well as the continuing effects of Rockland’s legacies to both its rural farmland past and its history of providing mental health services. This new Comprehensive Plan will help shape the development of the County government itself, and help identify issues and provide guidelines to towns and villages as to their own zoning and redevelopment plans, in a thoughtful, productive process.

Recognizing that the State of New York, a home rule state, has given the central tools of zoning and land use regulation to municipalities, the four primary objectives of the Comprehensive Plan are to:

1. Provide guidelines and offer general recommendations on future County land uses and possible alternative strategies.
2. Recommend general policies that could be undertaken at both the County and municipal levels to implement these strategies.
3. Address those matters that are under direct County jurisdiction.

4. Identify issues of land use and zoning conflicts between and among municipalities that should be resolved to allow the various municipal zoning regulations to work more effectively.

The comprehensive planning process encompassed an 18-month effort, including four public workshops; two public hearings; meetings with municipal representatives; and regular meetings with a Technical Advisory Committee, the County Planning Department, the County Executive's Office, and the County Legislature. It utilized Federal Census data, informative studies, surveys and focus groups convened by United Way, the Rockland County Legislature's Project Tomorrow working group, and committees of the Rockland County Legislature to gain wide public input. The project's website provided public access to the draft documents and the "click to comment" feature enabled residents to provide direct feedback to the project team throughout the process. The project was organized into three phases: Phase I involved project start-up and outreach, Phase II encompassed development of plan chapters, and Phase III culminated in the completion of the Draft Plan and its environmental review under State Environmental Quality Review (SEQR).

While the planning process will be complete when the Comprehensive Plan is adopted by the County Legislature, Rockland County's work does not end there. The Plan is more than a synthesis of existing conditions, but it is not a blueprint with mandated actions. It is a living document which is designed to spark recognition by municipal planners of the hopes and desires of the people of Rockland for a sustainable county and one which is affordable for young and old. In order to achieve the goals of the Comprehensive Plan and to implement its recommendations and potential modifications as appropriate, it will be necessary for ongoing communication and cooperation among the county, towns, and villages.

1.1 Comprehensive Plan Vision

The Comprehensive Plan seeks to preserve what residents love about Rockland. At the same time, it addresses the very real challenges facing the county, including the provision of affordable housing, jobs, traffic congestion, preservation of the natural and scenic qualities of the Hudson River and county, provision of adequate infrastructure, and preservation of open space and other environmental resources. The Plan recognizes Rockland's historical suburban development patterns, the importance of abundant open space and scenic vistas, and the central role of the automobile in suburban living. Toward these ends, the Plan's vision can be interpreted as a three-part strategy to guide land use patterns: Conservation, Centers, and Corridors and Clusters. This strategy can be seen throughout this document in helping to preserve or otherwise improve the quality of life for the county's residents in the coming decades.

Conservation

The Plan supports conservation of the 90% to 95% of Rockland's land area that exists outside its commercial centers and corridors, including the single-family suburban landscapes, parks and farmland, physical and visual access to the Hudson River, and other natural and environmental resources. Within this conservation area, there may be single sites and properties that are optimal for redevelopment and revitalization efforts; the Plan supports efforts to enhance these sites, as consistent with local zoning and planning policies.

Centers

In order to protect against out-of-scale development elsewhere in Rockland, a key focus of the Plan is to reinforce Rockland’s existing centers, defined here as an area’s commercial or mixed-use focal point. As part of this strategy the Plan encourages a mix of uses in these areas, including office, retail, residential, recreation, and entertainment.

Corridors and Clusters

There are several commercial corridors and office and industrial clusters in Rockland that provide a major job base as well as retail and community services. The Plan does not encourage expanding the existing commercial corridors and clusters, but does see the preservation and enhancement of these areas as essential to the economic well-being of Rockland.

1.2 Comprehensive Plan Goals

The Rockland County Comprehensive Plan is based on the following goals, which express the County’s vision for its future and underlie the Plan’s approach to decision-making. Overall, the goals emphasize a balanced economy with employment opportunities, the reinforcement of centers, the conservation and enhancement of existing neighborhoods, the need for housing options, and the preservation of open space.

Land Use and Sustainability

Goals:

- Conserve open space.
- Promote conservation (cluster) subdivision design to help conserve valuable and sensitive open space.
- Reinforce existing county centers through investment in infrastructure and housing, and support of businesses.
- Foster and maintain well-designed business and industrial corridors and clusters.
- Encourage smart growth, while preserving quality-of-life and existing community and neighborhood character.
- Acknowledge the impact of climate change on planning and County operations. Develop strategies for County departments to explore sustainable development measures and “green” technology to adapt to and mitigate the effects of climate change.
- Foster a balance between the home rule authority of Rockland’s municipalities with the legitimate concerns of adjoining communities.

Transportation

Goals:

- Promote integrated vehicular, mass transit, paratransit, bicycle, and pedestrian transportation infrastructure for an efficient network of roadways, railways, and pathways.
- Enhance mobility and accessibility in order to provide greater choices of travel for all, including the growing aging population.
- Work to reduce dependence on the automobile as the major mode of ground transportation and increase the use of public transport.
- Promote and enhance safety for motorists, pedestrians, and cyclists.

Economy

Goals:

- Foster opportunities for the growth of businesses in the county.
- Ensure a broad range of employment opportunities for residents.
- Maintain a strong tax base for the county, communities, and taxing jurisdictions.
- Protect the county's diminishing stock of developable commercial land from rezoning in order to ensure a balanced and stable tax base and local employment opportunities.

Neighborhoods, Housing, and Services

Goals:

- Expand housing opportunities for Rockland County's diverse population.
- Promote high-quality residential communities with a range of appropriate densities.
- Work with municipalities to protect historic resources and support cultural uses.
- Provide sufficient and affordable housing stock for the aging and young adult populations, caregiver work force, and emergency-service volunteers.
- Ensure that educational and community facilities and services adequately and equitably serve Rockland County's current and projected population.

Open Space and Environment

Goals:

- Improve parks and expand open space in high-density areas.
- Provide recreational resources serving the diverse needs of the population.
- Preserve and protect farmland and historic, cultural, and water resources.
- Ensure physical and visual access to the Hudson River.

Energy

Goals:

- Encourage energy efficiency and purposeful conservation in all facets of development and redevelopment.
- Promote a whole-building approach to sustainability in the areas of site development, water savings, energy efficiency, materials selection, indoor and outdoor environmental quality, and human and environmental health.

2.0 HISTORY AND REGIONAL SETTING

Rockland County is located approximately 30 miles northwest of Manhattan, and is bordered by the Hudson River on the east, Bergen and Passaic counties and New Jersey to the south, and Orange County to the northwest (see Figure 2.1). Westchester and Putnam counties are located across the river to the east and northeast, respectively. Considered the gateway to the Hudson Valley, Rockland is linked to the greater region by the New York State Thruway (Interstate-87/287), the Palisades Interstate Parkway, Route 9W, and the Garden State Parkway Extension.

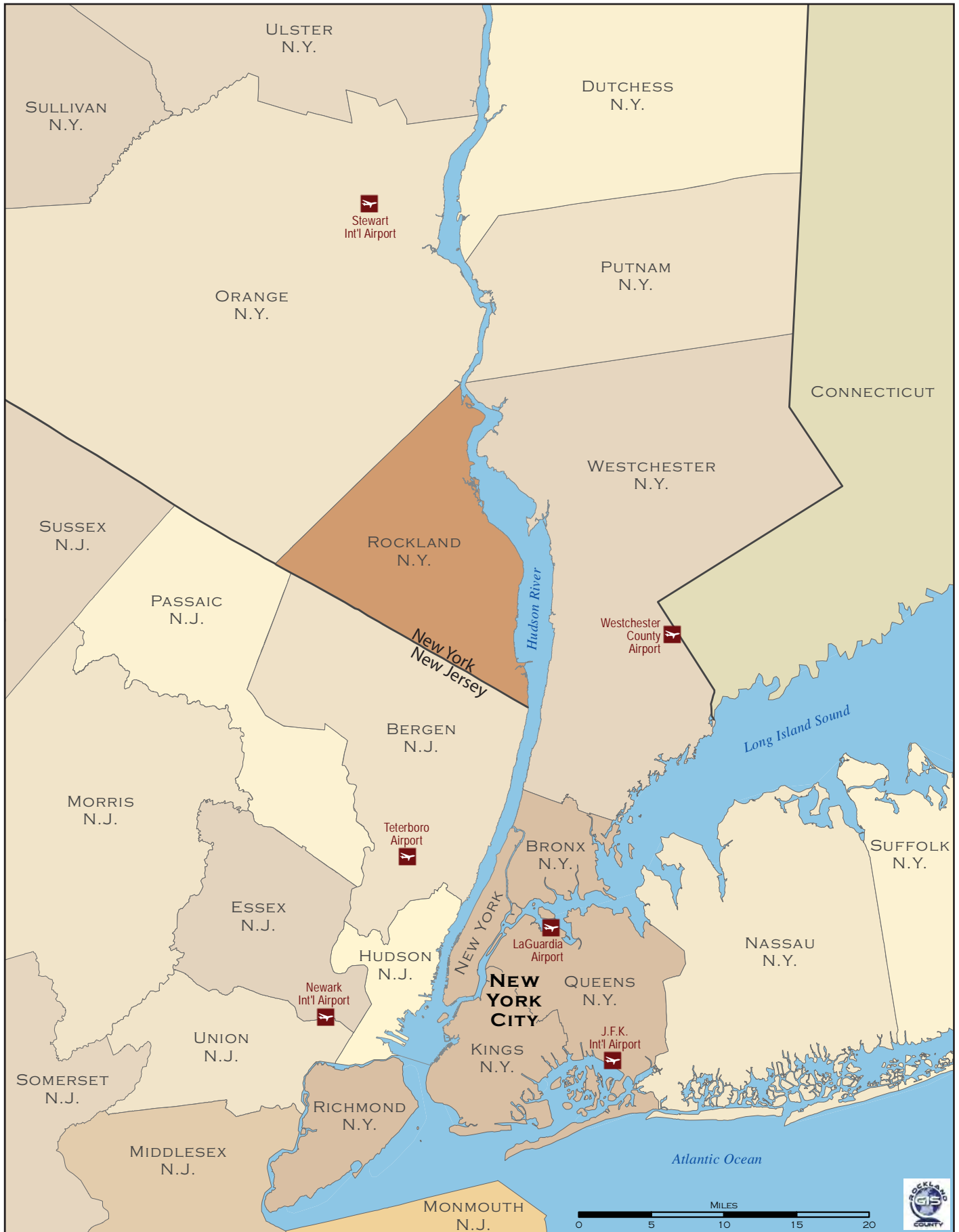
In addition to its roadway network, the county is accessible by rail, bus, and ferry services. Metro-North Railroad and New Jersey Transit provide passenger rail service on the Pascack Valley and Port Jervis/Main Lines. Direct-rail access to Midtown Manhattan is available via the Secaucus Transfer Station in New Jersey, and Downtown Manhattan is accessible via Hoboken. Metro-North also sponsors ferry service across the Hudson River, between Haverstraw and the Ossining Metro-North station, providing additional rail access to New York City. Furthermore, Rockland County's Tappan Zee Express bus service connects with Metro-North trains and Westchester Bee-Line buses at Tarrytown and White Plains, while other private bus operators provide bus service from Rockland County to New York City and other regional destinations.

Totalling approximately 176 square miles, Rockland is geographically the smallest county in New York State, outside of New York City's five boroughs. With nearly one-third of its land area devoted to preserved parkland, and approximately 40 miles of Hudson River waterfront, Rockland is known for its natural and scenic resources. In fact, Rockland's image and character is defined largely by its adjacency to the Hudson River. Not only does the Hudson River provide outstanding scenic views from and of Rockland County, it offers passive and active recreation opportunities, as well as historic and cultural areas of interest. The Hudson River contains significant biodiversity areas, including endangered animals and plants, and helps contribute to the county's economic well-being. The river also acts as a transportation route for commuters to New York City and for commercial shipping. For these reasons, the Hudson River has historically contributed to Rockland's character and identity – and will continue to do so.

The County is one of seven New York counties that make up the Hudson Valley Region; the other six are Dutchess, Orange, Putnam, Sullivan, Ulster and Westchester Counties. The County is also part of the Mid-Hudson Economic Development Region, is one of 13 counties that comprise the Hudson River Valley Greenway, and is part of the bi-state Hudson Highlands. In addition, Rockland is part of the New York Metropolitan Transportation Council (NYMTC), the Metropolitan Planning Organization (MPO) for New York City, Long Island and the lower Hudson Valley. On a more local level, Rockland is included in the Mid-Hudson South Transportation Coordinating Committee (TCC), one of three TCCs within NYMTC that recommend sub-regional transportation priorities and allow for a more localized planning process. The County is part of the Metropolitan Transportation Authority (MTA) District with 11 other counties: Orange, Dutchess, Putnam, Westchester, Nassau, Suffolk and the five boroughs of New York City.

Rockland consists of five towns – Clarkstown, Haverstraw, Orangetown, Ramapo, and Stony Point – and 19 villages, as well as a number of hamlets (see Figure 2.2). The villages and hamlets – which include both historic centers and more newly developed areas – give the county much of its special character.

FIGURE 2.1: REGIONAL LOCATION MAP

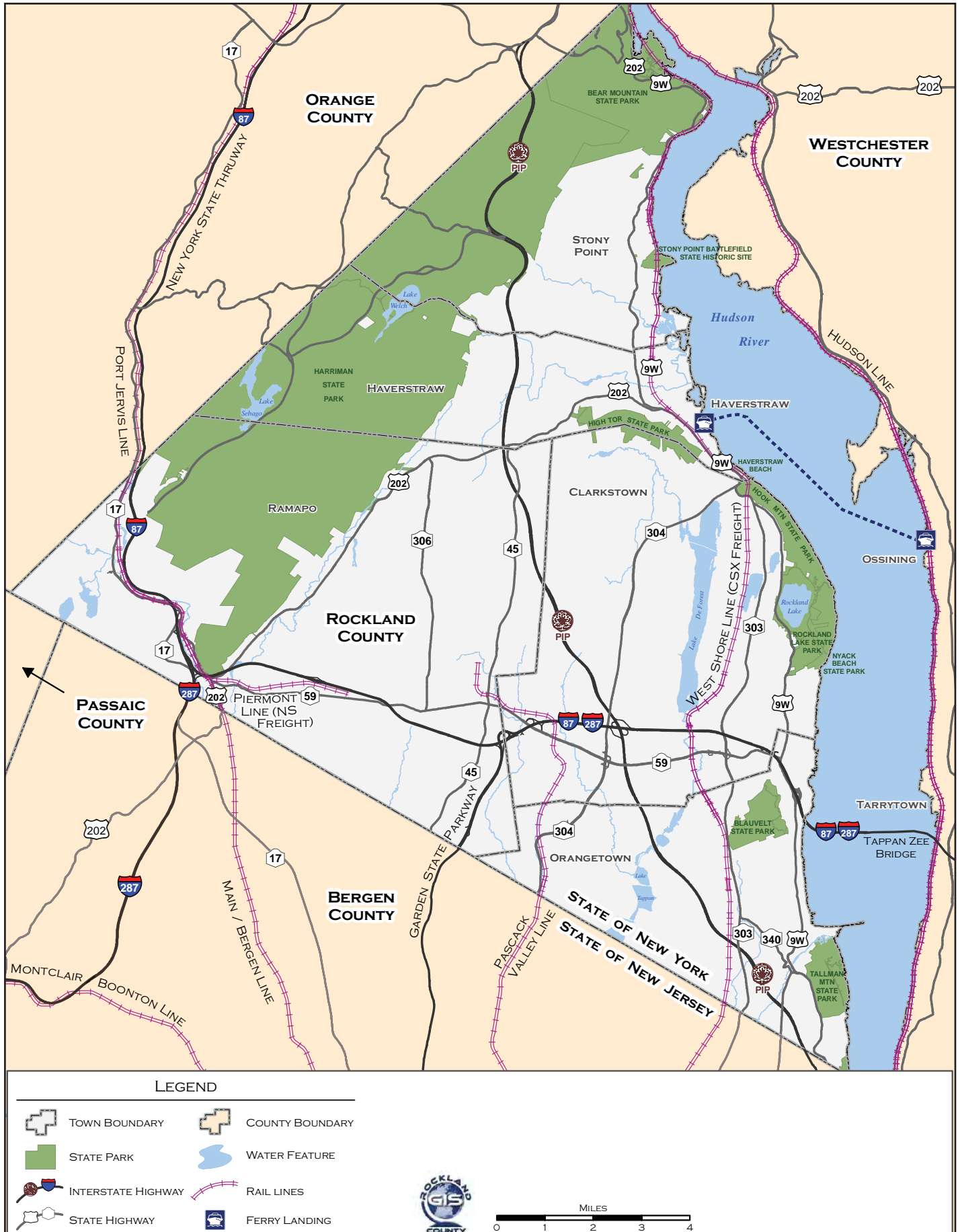


HISTORY AND REGIONAL SETTING



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FIGURE 2.2: REGIONAL TRANSPORTATION MAP



HISTORY AND REGIONAL SETTING



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2.1 History

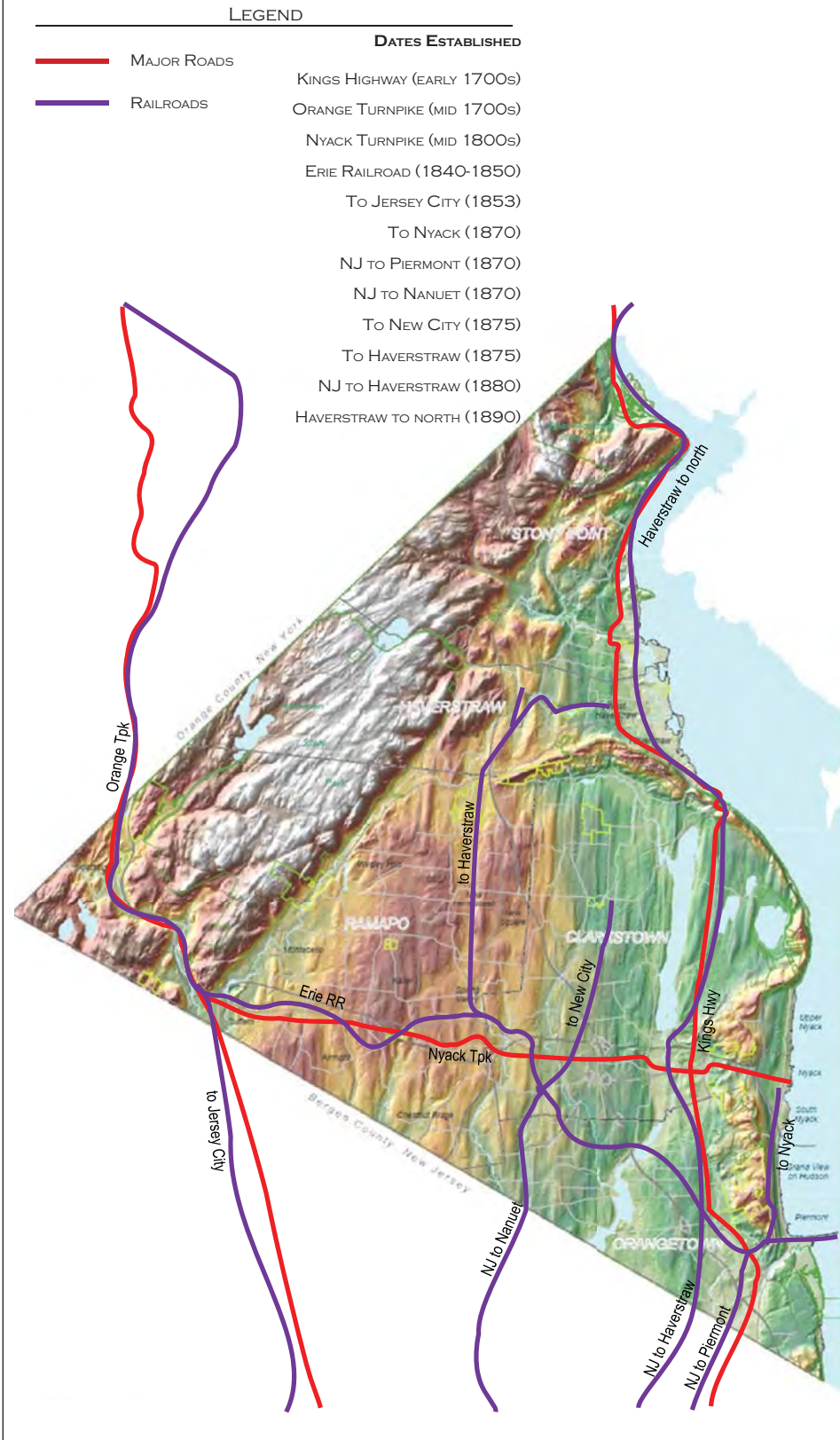
The first recorded residents of Rockland County were the Native Americans of the Delaware, or Lenni Lenape, nation. European settlement began after Henry Hudson, under commission to the Dutch East India Company, explored the region in 1609. Early Dutch efforts to settle the lower Hudson area were largely successful until the territory was given over to the English in 1664, and Dutch influence can be seen today in the form of sandstone homes in the county. Today's Rockland County was originally part of Orange County, which was established in 1686, but Rockland later separated from Orange County in 1798.

During the Revolutionary War, Rockland County was a key crossroad connecting New York and the southern colonies with New England. In addition to several small campaigns around Nyack and Haverstraw, major battles included the capture by the British of Fort Clinton at Bear Mountain in 1777 and the Colonial defeat of the British fort at Stony Point in 1779. Rockland is also known for the trial and hanging of British Major John Andre, who conspired with Benedict Arnold to turn over the fortifications at West Point to the British, as well as being the location of Britain's first formal recognition of the United States in 1783.

From the 19th Century on, Rockland's development has been closely linked to transportation improvements. Kings Highway was the first major roadway built in the early 1700s as part of the New York Provincial law of 1703. Much of it still exists today, including portions of what is now NY Route 303. Some other major Rockland roadways were built in the early 1800s, including the Orange Turnpike (now part of NY Route 17) between Suffern and Monroe, and the Nyack Turnpike (roughly NY Route 59), connecting Nyack to Suffern in 1825. In 1827, steamboat travel began from Nyack to New York City. In 1833, a charter was given for the New York and Erie (later the Erie-Lackawanna) Railroad, followed by the New Jersey and New York Railroad (later part of the Erie) and the New York Central (later West Shore Line) Railroad. The initial requirement that the Erie Railroad be located entirely within New York State led to the construction of the Piermont Pier on the Hudson River in 1841. The Erie Railroad was completed between Dunkirk on Lake Erie and Piermont in 1851. By 1893, the County Legislature established a county road system to connect its major business areas.

Historically, many of Rockland's major transportation improvements have reflected its natural geography. The county is separated from Orange County by the Highlands occupied by Harriman and Bear Mountain State Parks, and the main connection with the west is at the Ramapo Pass (also known as the Ramapo Clove). The Highlands mountain chain extends from southeastern Pennsylvania through New Jersey and New York, into western Connecticut, and links the northern end of the Appalachians to the Berkshire Mountains. Most of Rockland comprises two terrain basins lying east of the highlands and separated by the ridge of High Tor State Park. The northern, smaller, basin (Stony Point and Haverstraw) drains to the east and is open to the Hudson River. The southern, larger, basin (Ramapo, Clarkstown, and Orangetown) drains to the south and is separated from the Hudson by the ridge linking Hook Mountain and Palisades State Park. Openings to the river in this southern basin are largely limited to Nyack and Piermont. Upon its completion, the Erie Railroad provided an all-weather, primarily freight, alternative to the Erie Canal, using the only reasonably level route across the southern tier of New York State. A few years later, after a change in its charter, the railroad moved its eastern terminus from Piermont to Jersey City, producing the first north-south route serving Rockland, branching at Suffern. Figure 2.3 includes railroad development that occurred through the second half of the 19th Century.

FIGURE 2.3: HISTORICAL DEVELOPMENT OF ROADS & RAILROADS



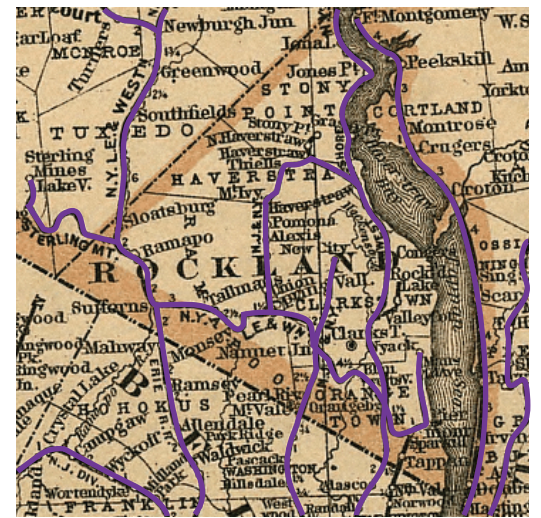
Major Roads & Railroads



1849

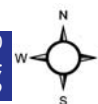


1870



1894

Development of Railroads



Infrastructure led to industrial growth in Rockland. Agriculture was a major use well into the 20th Century, but by the end of the 1800s, pockets of industry included brick making in Haverstraw and Stony Point, iron works in Ramapo, textiles in Garnerville and Spring Valley, shoe making in Nyack, quarries on the Hudson, ice harvesting at Rockland Lake, bookbinding in Pearl River, and cigar and pipe manufacturing countywide. Much of the industry used water power from the Ramapo and Hudson Rivers. The outlet for goods from Ramapo to points east was first by wagon to Haverstraw, then by the turnpike from Suffern to Nyack.



Knickerbocker Ice Co. at Rockland Lake, 1846

Source: Library of Congress

This growth in industrial activity spurred a local conservation movement, as intense stone quarrying along the Hudson River threatened to destroy the Palisades in New York and New Jersey, leading to the formation of the Palisades Interstate Park Commission in 1900. The commission initially acquired the 14-mile stretch of the Palisades between Fort Lee, New Jersey, and Piermont, New York. In 1906, Mary Averell Harriman, widow of Union Pacific Railroad president E.H. Harriman, donated 10,000 acres and \$1 million toward the expansion of the park in New York State, largely to stop the proposed relocation of Sing Sing Prison to Bear Mountain. Other well-known benefactors of the Palisades Interstate Park include financiers John D. Rockefeller, J.P. Morgan, and George W. Perkins. Today, the Palisades Interstate Park system covers more than 100,000 acres of land along some 20 miles of Hudson River waterfront. Since its inception, the park's camps have served thousands of children every summer, primarily from New York City, through the sponsorship of a number of social service organizations.

The beginning of the 20th Century saw further infrastructure improvements, as the Bear Mountain Bridge opened in 1924, providing the first vehicular crossing between New York City and Albany. With the opening of the George Washington Bridge in 1931, the bridges replaced cross-river ferry service and provided greater connectivity across the Hudson River between Rockland County and points east. In the 1950s, the Palisades Interstate Parkway and the New York State Thruway were opened, significantly increasing connectivity.

However, no modern transportation development has had a greater impact on Rockland than the opening of the Tappan Zee Bridge in 1955. Connecting South Nyack with Tarrytown, the bridge bisected the Village of South Nyack, eliminating more than 100 homes and the entire business district. More broadly, the bridge also altered the way residents of Rockland County interacted with New York east of the Hudson River. Prior to its opening, many Rockland residents who worked outside the county commuted through New Jersey to New York City. After the Tappan Zee Bridge was built, that commuting pattern began to shift from Rockland to Westchester County, a trend that continues today. The bridge also facilitated the growth in corporate uses, casual travel in Rockland, and more intensive development along the I-87/287 corridor, culminating with the opening of the Palisades Center Mall in 1998.



View of the Tappan Zee Bridge

Source: New York State Attorney General's Office

Today, some of the most critical planning issues facing Rockland County center on transportation: access to Midtown Manhattan, Westchester County, and Stewart International Airport. Projects related to these issues include the future of the Tappan Zee Bridge and the associated road and transit improvements, rail access to Stewart International Airport, and the Access to the Region's Core (ARC) Mass Transit Tunnel project, which, if built, will link northern New Jersey and Rockland with a one-seat train ride to Midtown Manhattan.

In 2000, in response to growing congestion on the Tappan Zee Bridge and along the I-87/287 corridor, MTA Metro-North Railroad, the New York State Thruway Authority, and the New York State Department of Transportation joined together to create a study team to consider the rehabilitation or replacement of the bridge and the addition of mass transit to the corridor. Plans for the project, which is undergoing an Environmental Impact Statement (EIS), call for the BRT system and bridge to open simultaneously, and the rail component to be built at a later date. The new bridge is being planned to accommodate commuter rail trains and will be built next to the old one, which will remain open until the new bridge is complete, at which point it will be demolished.

Another major transportation project potentially benefitting the county involves Stewart International Airport, located in Newburgh/New Windsor in Orange County. In November 2007, the Port Authority of New York and New Jersey took over the airport's long-term lease and proposed spending \$500 million over the next 10 years to upgrade the facility, as part of a push to create a fourth regional airport. In 2007, Stewart International Airport's traffic tripled, to more than 900,000 passengers, before the economic downturn in 2008 somewhat reduced its service and enplanements.

In 2008, MTA Metro-North Railroad, in partnership with the Port Authority (and in cooperation with the New York State DOT and New Jersey Transit), began the West of Hudson Regional Transit Access Study, to identify transit options to improve mobility and accessibility in the Lower Hudson Valley west of the Hudson and to Stewart International Airport from the surrounding region. The study will look at transit alternatives for both the commuter market and the airport market, with options including rail service, bus rapid transit, light rail transit, high-speed ferry, regional express bus routes, and airport shuttles. An alternative with potential impacts for Rockland is a spur to Stewart International Airport from the existing Salisbury Mills-Cornwall station on the Port Jervis line. This would provide Rockland residents with a direct rail link to the airport. A similar option involves connecting bus or BRT service between Salisbury Mills-Cornwall and the airport.

2.2 Previous Land Use Planning Efforts

Rockland County Master and Comprehensive Plans¹

Rockland County Land Use Plan (1973)

Rockland's first master plan assumed a county population of 400,000 people by the year 2000. The plan proposed higher-density housing in well-defined areas with adequate public facilities, and commercial and industrial development in clusters well-served by transportation. Its Land Use Plan included a recreation and open space plan focusing on the preservation and enhancement of the natural environment, and a housing plan outlining strategies to renew the county's village and hamlet centers.

Rockland County: River to Ridge, A Plan for the 21st Century (2001)

This plan sought to address Rockland County's transformation from an outer fringe suburb of New York City to an inner-ring suburban area and the emerging issues of growth, sprawl and maintenance of quality-of-life. *River to Ridge's* Land Use Plan component provided a basis for public investment and improvements, facilitating linkages between centers and activity nodes and outlining guidelines for specific types of land uses and areas, such as traditional downtown centers, suburban hubs, corridors, and natural areas. The Land Use Plan embodied a regional focus that encourages municipalities to manage the intensity of uses in some locations as needed, while promoting greater development in others. *River to Ridge* also contained a set of policy recommendations covering the areas of transportation, housing, open space and environment, economic development, and the waterfront. This plan was not formally adopted by the Rockland County Legislature, but has been used as a guide in land use actions, decision-making, and in conducting all County General Municipal Law (GML) reviews.

Other County and Regional Plans

The Rockland Report (1995)

This report, prepared by the Rockland County Department of Planning, presented a range of population, economics, and housing data covering the period from 1990 to 1995. Much of the report updated the 1990 Census, but it also included some data not provided in the Census. Though *The Rockland Report* did not contain any policies or action items, it did suggest that the county was positioned for healthy economic growth.

A Region at Risk: The Third Regional Plan for the New York-New Jersey-Connecticut Metropolitan Area (1996)

Produced by the Regional Plan Association (RPA), this plan envisioned five major initiatives for the Tri-State Metropolitan Region: 1) greensward – preserving the region's significant natural resources; 2) centers – focusing population and job growth in the region's urban centers; 3) mobility – reconfiguring the transportation and transit network to adequately serve both cities and suburbs; 4) work force – improving the skills and contacts necessary for residents of the urban centers to fully participate in the region's economy; and 5) governance – reorganizing political and civic institutions to achieve these regional planning goals. For each of these five initiatives, *A Region at Risk* proposed a set of specific recommendations, and then outlined steps for implementing the suggested action items.

Rockland County Open Space Guidelines (1999)

¹ In 1997, the New York State General Municipal Law replaced the term "Master Plan" with "Comprehensive Plan" (effective in 1998), which is the term used to today to describe this Comprehensive Plan.

These guidelines, prepared by the Rockland County Planning Department on behalf of the County Executive's office, created a set of priority features that Rockland County would seek to preserve, including properties that would facilitate a connected system of open space, environmentally sensitive resources, farms, historic and cultural sites, the Hudson River shoreline, open space achieved through redevelopment, recreation areas, rivers and streams, and watershed areas.

2010-2035 Regional Transportation Plan – Shared Vision for a Shared Future (2009)

Produced by the New York Metropolitan Transportation Council (NYMTC), this plan satisfied the Metropolitan Planning Organization's requirements under Federal regulations to develop a long-range regional transportation plan that outlines the guiding principles for the region's transportation decision makers. Proposals relevant to Rockland County include the replacement of the Tappan Zee Bridge and related I-87/287 corridor improvements, improvements to the Port Jervis rail line, construction of the Access to the Region's Core Mass Transit Tunnel project, and expanded Hudson River ferry service.

Revitalizing Hudson Riverfronts: Illustrated Conservation & Development Strategies for Creating Healthy, Prosperous Communities (2010)

Produced as a partnership project by Scenic Hudson, the City of Kingston, and the New York State Department of State, this plan is a regional resource guide providing a number of suggestions for sustainability, resource protection, and urban design. The plan illustrates tools to promote the development of lively, pedestrian-friendly, mixed-use riverfronts in and adjacent to municipal centers; while conserving forests, farms, wetlands, and fields and providing for a continuous public greenway corridor along the Hudson River.

2.3 Issues and Recommendations

Because of its proximity to New York City, Rockland County is subject to a number of regional forces, including the transportation policies and economic conditions of the metropolitan area and the Hudson Valley Region. The County should take a leadership role not only in tracking regional projects that could directly affect its towns and villages, but in maintaining close coordination with policymakers and stakeholders. To this end, Rockland should have a proactive involvement in inter-county collaboration, particularly for issues that cross political borders such as transportation and infrastructure projects, preservation of natural resources, and protection and expansion of the region's open space network.

Recommendation #1: Ensure That Regional Transportation Projects Serve Rockland County's Interests

As discussed earlier in this chapter and in **Chapter 6.0: Transportation**, there are several major regional transportation projects in the pipeline that potentially have significant impacts on Rockland County. The specific nature of these projects is largely outside the scope of this Comprehensive Plan, and the projects are subject to their own separate reviews under the State Environmental Quality Review Act (SEQRA). However, the County must advocate for Rockland County residents and ensure that the projects both provide a clear benefit for residents and do not generate adverse impacts.

For example, one alternative set forth in the I-287/Tappan Zee Bridge Corridor Study proposes bus rapid transit (BRT) service between Suffern (in Rockland County) and Port Chester (in Westchester County). In this scenario, BRT service would use High-Occupancy Vehicle/Toll (HOV/HOT) lanes as a bus-way, meaning that BRT buses would share a lane(s) with high-occupancy/tolled vehicles. This is an effective approach to addressing traffic congestion along I-87/I-287, particularly between the Tappan Zee Bridge and the Garden State Parkway. Allowing high-occupancy/tolled vehicles and BRT buses to share lanes

would increase lane capacity, while the transit option would help to decrease vehicle traffic congestion levels along the corridor. Thus, Rockland County should work with the Corridor Study Team in support of this shared BRT/high-occupancy vehicle lane approach, and the County should also coordinate with the team to ensure that the public transit aspect of this alternative is fully integrated with Rockland's existing bus network.

Another major transportation project, the West of Hudson Regional Transit Access Study, involves a potential rail connection between Metro-North's Port Jervis Line and Stewart International Airport in Orange County, providing a connection between New York City and the airport. While this project has the potential to benefit Rockland County residents by providing a direct public transit link to one of the region's major airports, many potential users of the rail service may not live or work in Rockland. The County should coordinate with Metro-North and New Jersey Transit (which owns the Main/Bergen Line in New Jersey) to ensure that a rail link from New York City to Stewart International Airport adequately serves Rockland residents without adversely affecting surrounding towns and villages in the county.

Future bus initiatives should focus on increasing weekday commuter bus service from Rockland to New York City through New Jersey. Work with PANYNJ on the improvements of the Lincoln Tunnel Express Bus Lane (XBL) –Express bus lines south to New York City could connect with the proposed east-west transit component along the I-87/287 corridor, thereby creating a more comprehensive transportation network and continue to build reverse commuting patterns.

Finally, the ARC Mass Transit Tunnel project, if ultimately built, would construct a rail tunnel under the Hudson River containing two new tracks between New Jersey and Penn Station, New York, providing transfer-free service from Rockland County to New York City via connections to the Pascack Valley and Port Jervis Rail Lines. Again, the County should work to promote regional cooperation and coordination with New Jersey Transit, the Port Authority of New York and New Jersey, and Bergen County, to make certain that the improvements proposed in the ARC Mass Transit Tunnel project are properly integrated with the existing Metro-North and NJ Transit rail lines serving Rockland.

Recommendation #2: Support Regional Strategies for Preserving Scenic, Natural, Historic, Cultural, and Recreational Resources

Many of the key issues facing Rockland County do not correspond to political and jurisdictional boundaries, but are of a regional nature. The county contains many of the region's most valued scenic, natural, historic, cultural, and recreational resources, including most prominently the Hudson River. The County must continue to recognize the Hudson and other assets as vital regional resources, conserving their environmental and scenic quality, and maintaining physical and scenic access to the greatest extent possible. Actions taken in a location in Rockland may have broad environmental impacts on areas far removed from the initial source. A significant number of Rockland's residents work in Bergen, Orange and Westchester counties, and vice versa, making traffic congestion a regional as well as local problem. Cultural amenities and historic and recreational resources have the potential to draw visitors from throughout the region, and can be mutually supportive.

In the Lower Hudson Valley, one of the recognized tools for regional planning is participation in the Hudson River Valley Greenway Program. As discussed more fully in **Chapter 9.0: Historic and Cultural Resources**, the program is a voluntary regional strategy for preserving the major resources of the Hudson River Valley while promoting compatible economic development. One of the fundamental objectives of the Greenway Act is the development and implementation of a regional compact strategy.

Participation in the Greenway program makes communities eligible for technical assistance and grant funding for community planning projects. Currently, nearly all Rockland County municipalities, as well as the County itself, are Greenway communities. The County will continue its full participation in the Greenway program, including efforts to establish a regional system of trails through the Greenway Land Trail Program that link important scenic, natural, historic, cultural, and recreational resources.

Rockland County has secured from the Greenway Council the funds necessary to begin developing a countywide regional compact. To this end, this Comprehensive Plan – by incorporating the goals and objectives of the Hudson River Valley Greenway – will be used as Rockland’s greenway compact plan.

Rockland County has clear connections to its neighboring counties, but there is currently no regional forum which serves to enhance communication among Rockland County, Orange County, and Bergen County, particularly about regional issues that may cross county or even state lines. The County should seek to establish a continuing dialogue with its neighbors, perhaps by assigning a liaison from certain departments that deal with regional issues, such as Planning, Transportation, and Health (for water issues). Such dialogue would keep the three counties informed of major projects or actions and could lead to partnership initiatives to address regional issues.

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3.0 DEMOGRAPHICS

The demographic trends of Rockland County and its relationship to the surrounding region, New York State, and the nation are drawn from official U.S. Census Bureau data, including the decennial Census of Population, the American Community Survey, and the Population Estimates Program. In addition, this chapter presents data of the Association of Religion Data Archives (ARDA) which use Census data for the county in a statistical compilation of actual counts or estimates of adherents to religious denominations.

3.1 Historic Trends

The New York Metropolitan Area has steadily expanded by geographical definition and grown in population. In 1961, Jean Gottmann described the Eastern Seaboard of the United States from Boston to Washington, D.C. as a “megalopolis,” a single region, which despite rural and less-settled component areas, is so interlinked by economic activity and commutation that no one area can escape the influence of the others.¹ For Rockland, proximity to New York City has been a primary influence, and even given fluctuations in settlement patterns, population growth has increased steadily and will continue to do so. Prior to the opening of the Tappan Zee Bridge, the county was relatively unsettled for a close-in suburb, at fewer than 100,000 residents. In the 1960s and 1970s, growth proceeded rapidly, but between 1980 and 2000 a slowing pattern emerged. Reaching nearly 287,000 persons by 2000, fewer residents had been added over the previous 20 years than in the 1970 decade. By 2008, estimated at 298,545 persons by the U.S. Census Bureau², Rockland had grown 4% in the new decade and will likely exceed 300,000 residents by 2010, given present trends. Compared with its neighboring counties, as Table 3.1 shows, Rockland remains the smallest county in terms of population, but is slightly faster growing than Westchester or Bergen. However, relative to Orange County, Rockland is more densely settled at 1,716 persons per square mile of land area. This represents less density than settlement in Westchester or Bergen counties, reported at 2,203 and 3,824 persons per square mile of land area, respectively.

Table 3.1: Population Growth, 1950-2008: Rockland and Neighboring Counties

	<i>Number of Persons</i>							<i>Percent Change</i>	
	1950	1960	1970	1980	1990	2000	2008	1950-2000	2000-2008
Rockland	89,276	136,803	229,903	259,530	265,475	286,753	298,545	221.2%	4.1%
Orange	152,225	183,734	221,657	259,603	307,647	341,367	379,647	124.3%	11.2%
Westchester	625,816	808,891	894,104	866,599	874,866	923,459	953,943	47.6%	3.3%
Bergen	539,000	780,255	898,012	845,385	825,380	884,118	894,840	64.0%	1.2%

Source: U.S. Census Bureau, 1950-2000 Census of Population
U. S. Census Bureau, Population Division, 2008 Population Estimates Program 2008

¹ Gottmann, Jean. *Megalopolis: The Urbanized Northeastern Seaboard of the United States*. New York: The Twentieth Century Fund, 1961.

² U.S. Census Bureau, Population Division, Population Estimates Program.

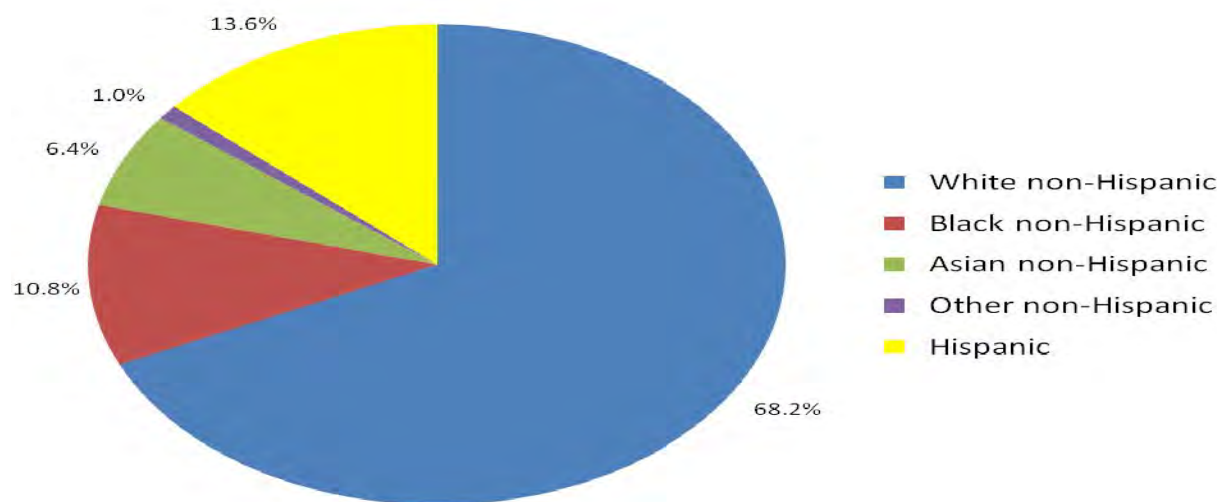
Recent population trends have brought greater diversity in race-ethnicity and religious affiliation, more retiring baby boomers and pending elderly, fewer residents in prime work-force ages, larger families and households, increased foreign-born and linguistically-challenged residents, fewer married and more single persons, lower rates of disability, and higher levels of educational attainment. These trends have ramifications for social service delivery, physical and economic development, housing needs, transportation and infrastructure demand, and educational needs of Rockland County. The following sections will explore recent trends and their implications.

3.2 Growing Diversity

Race-Ethnicity

The majority of the net population growth (11,792 new residents) that occurred in Rockland County between 2000 and 2008 was comprised of an increase in Hispanic residents, or 11,322 Hispanics. White non-Hispanics, which number 203,530 persons, or 68% of county residents, declined from 205,653, or 72% of the population in 2000, which was balanced by the increase in Black non-Hispanic residents of 2,192 persons to 32,331, or 11% of all inhabitants. Asian non-Hispanics demonstrated a sizeable growth of 3,534 persons, or 23% to 19,241 in 2008, while all Other non-Hispanics³ declined to roughly 1% of total. As Chart 3.1 illustrates, with roughly a one-third minority share, the county has become more diverse in recent years, but remains less so than the New York Urban Region⁴ as a whole, where 45% of all inhabitants are racial-ethnic minorities.

Chart 3.1: Racial-Ethnic Composition of Rockland County Population, 2008



Source: U.S. Census Bureau, 2008 American Community Survey

³ Other non-Hispanics are comprised of persons who are either “American Indian and Alaska Native” (749), “Some Other Race not Native Hawaiian or Other Pacific Islander” (681), and “Two or More Races” (1,509).

⁴ Comprised of 31 counties in New York, New Jersey and Connecticut that represent a virtually closed commutershed focused on New York City. For the New York urban region counties outside of New York City, the minority share represents 37 percent of total population.

Nativity

From the perspective of national origin, Rockland's recent growth has also increased the share of foreign immigrants in the total population. As of 2008, 237,061 county residents were native-born, up 2% from the native population of 2000, while foreign-born inhabitants numbered 61,484 persons, and grew 12% over 2000. The rate of foreign immigration has averaged 4.4 new persons per thousand residents annually, or roughly half the rate of natural increase in the population, at 8.6 new persons annually.⁵ The foreign-born were 21% of the county's 2008 population, versus 19% in 2000. This was comparable to the state at 22%, but less than the region at 26%, both of which are higher than the nation as a whole at 13% in 2008 due to the region's historical and continuing role as a point of entry for new immigrants.

On average, over the last eight years, Rockland County has directly attracted some 1,200 foreign immigrants annually, according to the international migration data of the U.S. Census Bureau Population Estimates Program. By 2008, 13,477 foreign-born persons that entered the country since 2000 resided in the county, suggesting the attraction of additional immigrants who have relocated from elsewhere in the region or nation. Ninety-eight percent, or 6,583 of the 6,718 net increase in foreign-born residents by 2008, previously resided in Latin America, their region of birth, while 949, or 14%, previously resided in Asia.⁶ For all newer immigrants now residing in Rockland, 69% of those who entered since 2000 were from Latin America and 22% were from Asia.

Religious Affiliation

The growing racial-ethnic and immigrant diversity of Rockland County has fueled changes in the religious affiliation of county residents, but so have changes among a relatively stable white non-Hispanic population and their high birth rates. In 2000, according to the Association of Religion Data Archives (ARDA), residents who were adherents of the Catholic Church numbered about 126,000 in Rockland, while those of the Jewish faith in any form⁷ were estimated at 90,000 persons, and those of mainline and evangelical Protestant religions accounted for 15,600 persons.⁸ By contrast, in 1990, Catholics numbered 109,100, Protestants 23,900, and those of the Jewish faith 60,000 persons. Jewish population numbers are estimates, versus actual counts given for Catholic and Protestant religions.

Since 2000, trends in population growth by ancestry suggest that adherents of the Catholic faith have declined as much as 5% despite the growth in Hispanics, that Protestants have remained relatively unchanged, and that members of the Jewish faith have increased. Nearly one third of Rockland's residents are Jewish, or roughly 100,000 persons today, and the county is reputed to have the highest Jewish population per capita of any county in the U.S.⁹ The villages of New Square, Kaser, New Hempstead, and Wesley Hills, and the hamlet of Monsey comprise major centers of Jewish life. By contrast, places like Haverstraw have strong concentrations of Hispanic immigrants. The exclusive nature of some settlements has led to development disputes and a disparity in settlement patterns among groups.

⁵ Measured from the rate of births at 15.6 less the rate of deaths at 7.0 per thousand residents, according to Rockland County data of the U.S. Census Bureau Population Estimates Program.

⁶ The increase of 6,718 foreign born persons was comprised of the loss of 1,995 Europeans and the gain of 8,713 non-Europeans, consisting of 949 Asians, 496 Africans, 54 from Oceania, 6,583 from Latin America, and 631 from North America.

⁷ The ARDA does not differentiate among forms of Judaism, including Orthodox, Conservative, Reform and Hasidic.

⁸ Orthodox and other theologies were minimal. Data were not available for historically African American denominations and numerous residents had unclaimed affiliations.

⁹ <http://www.thearda.com>

3.3 Components of Change

Rockland County's growth in population is driven by the major forces of natural increase and net migration. Natural increase is comprised of births less deaths of residents, while net migration reflects net international inflows (immigrants less emigrants) and net domestic relocation (US residents moving in, less those moving out of Rockland County). On balance, as Table 3.2 shows, over the last 18 years natural increase has become a larger determinant of population growth, increasing in importance from adding 2,225 new persons per annum in the 1990s to 2,609 per annum in the current decade. This rise has been entirely attributable to the increase in births, which rose from 4,246 live births per annum in the 1990s to 4,718 per annum in the 2000s. Deaths, which negate the impact of births, have also increased, reflecting the aging of the county's population.

Even though foreign immigration has been on the rise, the overall net migration component has declined further as a cause of growth. In the 1990s, roughly 200 persons per annum moved out of Rockland County, on balance from the cross-current flows of 1,200 foreign migrants moving in, and 1,400 Rockland residents moving out per annum. In the current decade, net migration flows have created an annual loss of 1,946 residents, or tenfold the 1990 decade average. Now, nearly 3,300 Rockland residents move out of the county annually, while 1,351 foreign immigrants settle in the county annually on a net flow basis. Compared with the region and the state, Rockland County's domestic migration loss is greater relative to its international migration gain, although the magnitude of domestic loss in the region and the state far exceeds that of Rockland County.

It should be noted that in all cases stated, net migration flows are the outcome – either positive or negative – of the balance between gross in-migration and gross out-migration of population.

Table 3.2: Components of Rockland County's Population Growth, 1990-2008

	<u>In Persons over</u>		<u>Persons per Annum</u>		<u>As % of Total</u>	
	<u>Period</u>	<u>Period</u>	<u>Period</u>	<u>Period</u>	<u>Period</u>	<u>Period</u>
	1990 to 1999	2000 to 2008	1990 to 1999	2000 to 2008	1990 to 1999	2000 to 2008
Population at Start	265,475	286,753	--	--	--	--
Population Change	21,278	11,792	2,128	1,474	100.0%	100.0%
Natural Increase	22,551	20,869	2,255	2,609	106.0%	177.0%
+Births	42,461	37,745	4,246	4,718	199.6%	320.1%
-Deaths	-19,910	-16,876	-1,991	-2,110	-93.6%	-143.1%
Net Migration	-1,983	-15,565	-198	-1,946	-9.3%	-132.0%
Int'l Migration	12,036	10,807	1,204	1,351	56.6%	91.6%
Domestic Migration	-14,019	-26,372	-1,402	-3,297	-65.9%	-223.6%
Statistical Discrepancy	710	6,488	71	811	3.3%	55.0%
Population at End	286,753	298,545	--	--	--	--

Source: Urbanomics, based on U.S. Census Bureau, Population Division, Population Estimates Program

3.4 Age Structure of the Rockland County Population

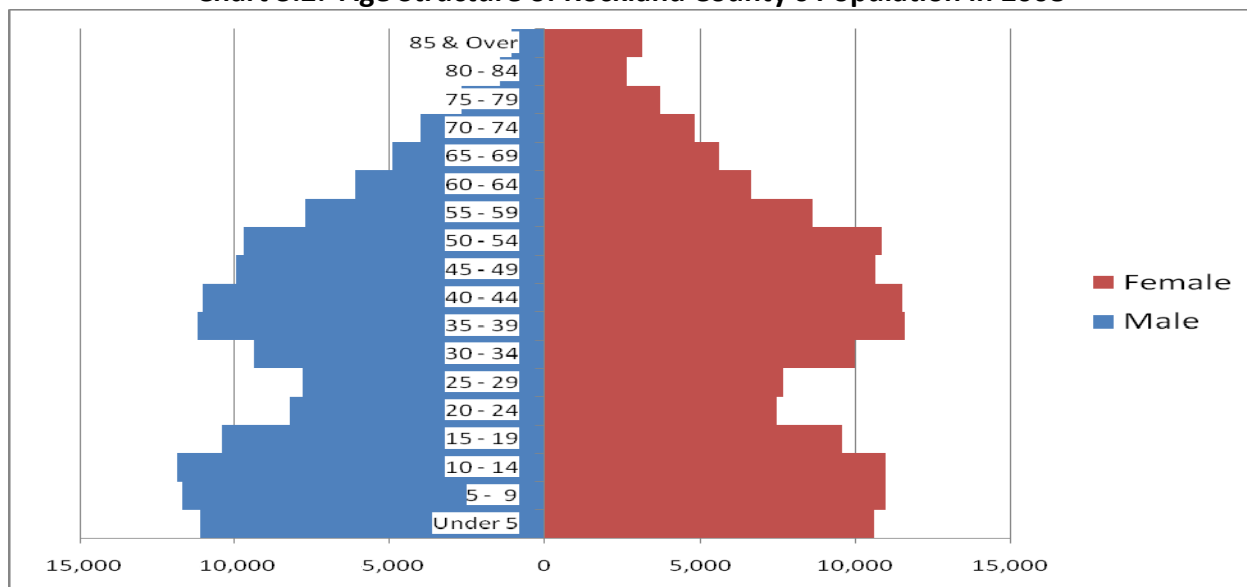
Birth, death and migration flows are of considerable importance in comprehensive planning because they alter the age structure of an area's population and affect the demand of its residents for community facilities. Chart 3.2 presents the age/sex structure of Rockland County residents in 2008 by five-year age cohort and gender. The chart depicts a broad base of children and young adults under 25 years of age, followed by a narrow waist of residents in young labor force ages (25-34 years), a broader scale of middle aged inhabitants associated with home-owning and baby boom generations (35 to 64 years), and a tapering profile of retirement ages (65 years & older). Each age group is discussed separately and compared to the county's age structure in 2000.

- **School-Aged Children.** Typically defined as persons under 18 years of age, school-aged children numbered 79,563 in 2008, having declined by 723 since 2000. However, younger children, under 15 years of age, which comprised 65,445 in 2008, declined by 1,967 over the period, although the youngest component under five years increased by 597 children. The strong birth rates evidenced in the last decade and expected to continue will likely keep this younger age group growing.
- **Teens and Young Adults.** Aged 15 through 29 years, this group of 60,575 persons which were nearly comparable in size to younger children, actually decreased by 350 over the period. The teens and young adults include, almost entirely, the "Echo Boom" generation born between 1982 and 1995, who are now 13 through 26 years of age. Among the immigrant population, this group represents the dominant age of new arrivals, but among the white non-Hispanic population, they comprise the major source of domestic out-migration.¹⁰ For those that remain in Rockland over the future, they will likely advance into prime labor force ages in greater number than the existing population.
- **Prime Labor Force Ages.** The prime labor force population, now 30 through 44 years of age, numbering 51,572 persons or 17% of total, decreased by 13,071 persons since 2000. Demographically smaller, it includes the "Baby Dearth" generation born between 1965 and 1981, now 27 through 43 years of age. Housing affordability can lessen the attraction or retention of this home-buying age group in the population even further in the future.
- **Mature Labor Force Ages.** Aged 45 through 64 years, the mature labor force age group numbered 80,831 persons or 27% of total and grew by 11,120 over the decade, of which those aged 55 through 64 years grew by 8,259. This group includes the "Baby Boom" generation born between 1946 and 1964 now 44 through 62 years of age. Growth in the 55-64 age cohort suggests a pending bulge in retirements, resulting with some of the population relocating out of Rockland County.
- **Retirement Ages.** Those aged 65 years and over numbered 40,122 persons in 2008 or 13% of the total. Since 2000, this age group increased by 6,269 persons, and is likely to expand further over the next decade.

¹⁰ New York Metropolitan Transportation Council (NYMTC), 2000-2005 outputs of a mutually exclusive racial-ethnic cohort survival population model for Rockland County. Using period changes in population by age and sex, the model generates new births and ages existing population to derive the age structure of net migration in the population change.

Recent changes in the age structure of Rockland County’s population have produced a measureable increase in the median age. Now 38.2 years, the median age has risen by two years, or 5.5% from a median age of 36.2 years in 2000.

Chart 3.2: Age Structure of Rockland County’s Population in 2008



Source: U.S. Census Bureau, 2008 American Community Survey

3.5 Household Formation

Of the 298,545 residents of Rockland County in 2008, 97% reside in households, while 3% are in group quarters, such as institutions and dormitories. The household population of 289,224 persons forms 94,687 separate households, averaging 3.05 persons per household. In the current decade, household formation has proceeded less rapidly than the growth in household population, resulting in the rise of average household size since 2000.

Households are comprised of families and unrelated individuals, including single-person households and two or more unrelated persons living together. In Rockland County, families number 71,277 in 2008 and have increased by 333, or 0.5%, since 2000 (see Table 3.3 below). By contrast, nonfamily households number 23,410 and have grown by 1,679, or nearly 8% since 2000. The majority of nonfamily households are comprised of single persons living alone, who number 20,069, or 21% of all Rockland County households. Since 2000, this type of household has expanded by nearly 13%.

Despite nearly stagnant growth in family formation, not all family groups have grown slowly. Female-headed, non-married households have grown by 15%, or added another 1,433 new households between 2000 and 2008. Male-headed, non-married households have remained relatively unchanged at 3,325 households. However, married-couple families have actually declined in the decade from 58,177 in 2000 to 57,017 at present, or are down by 2%. Across all family types, families with children increased by 733, or 2%, while married-couple families with children declined by 1,369 or 5%. Single-parent families with children offset this loss with female-headed families rising by 1,492 or 33%, and male-headed families increasing by 610 or 50%.

Table 3.3: Household Formation Trends in Rockland County, 2000-2008

	<i>Households</i>		<i>Change 2000-2008</i>	
	2000	2008	#	%
Total Households	92,675	94,687	2,012	2.2%
Family households	70,944	71,277	333	0.5%
With own children < 18 years	34,878	35,611	733	2.1%
Married-couple families	58,177	57,017	-1,160	-2.0%
With own children < 18 years	29,069	27,700	-1,369	-4.7%
Male-headed householder, single	3,265	3,325	60	1.8%
With own children < 18 years	1,221	1,831	610	50.0%
Female-headed householder, single	9,502	10,935	1,433	15.1%
With own children < 18 years	4,588	6,080	1,492	32.5%
Nonfamily households	21,731	23,410	1,679	7.7%
Living Alone	17,843	20,069	2,226	12.5%
65 years & over	7,219	7,602	383	5.3%
Unrelated Individuals	3,888	3,341	-547	-14.1%

Source: U.S. Census Bureau, 2000 Census of Population, and 2008 American Community Survey

3.6 School Enrollment and Educational Attainment

Among the population three years of age and older, 86,774 persons, or 30% of all residents, are currently enrolled in school, ranging from nursery or preschool through college or graduate and professional training. As Table 3.4 shows, the primary and secondary school system provides the majority of the educational service, enrolling three in every four students. Demand for space in elementary schools has declined by nearly 9% over the decade, while growth in high school enrollment has increased by nearly 12%. More children are currently in nursery school than kindergarten, not necessarily a sign of growing demand for elementary or secondary space over the coming years, as children can be enrolled in nursery school for more than one year. The fastest growth has occurred, however, at the higher educational level, with an increase of nearly 3,400 college and graduate school students in recent years, or a rise of 19%. Some of this growth may have been attributable to the decline in job opportunities and the return of older residents to higher education for career or intellectual advancement.

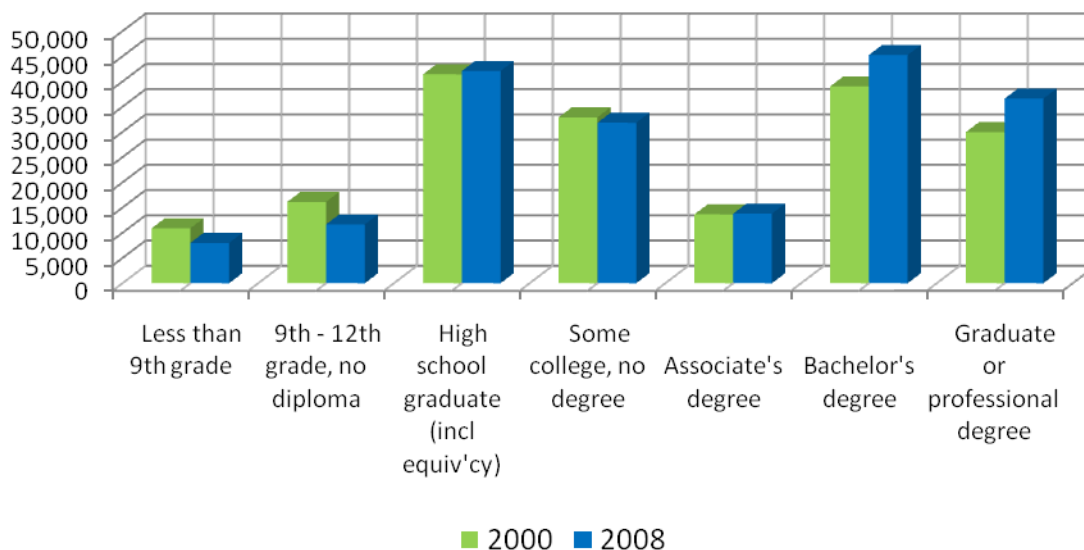
Table 3.4: School Enrollment in Rockland County, 2000 and 2008

SCHOOL ENROLLMENT	2000	2008	2000-2008	
	<i>Census</i>	<i>ACS</i>	#	%
<i>Population 3 years & over enrolled in school</i>	84,629	86,774	2,145	2.5%
Nursery school, preschool	6,771	6,921	150	2.2%
Kindergarten	4,493	4,249	-244	-5.4%
Elementary school (grades 1-8)	37,668	34,436	-3,232	-8.6%
High school (grades 9-12)	17,854	19,934	2,080	11.7%
College or graduate school	17,843	21,234	3,391	19.0%

Source: U.S. Census Bureau, 2000 Census of Population, and 2008 American Community Survey

The adult population of Rockland County, 25 years of age and over, is quite well educated. A total of 127,500 residents 25 years old and over have attended college, with 81,870, or 43% having received a Bachelor's degree or greater. By contrast, the highest educational attainment for some 42,000 residents 25 years old and over was graduation from high school, while fewer than 20,000 other residents have not received a high school diploma. Chart 3.3 depicts the change in educational attainment over the current decade. It is evident that a significant improvement occurred in recent years among residents holding college, graduate, or professional degrees. Those with graduate or professional diplomas rose by 22%, while college graduates increased 16% between 2000 and 2008. At the lower end of the educational spectrum, the number of adults with less than a high school degree shrank by 27%, resulting in nine out of every 10 having completed their secondary education.

Chart 3.3: Change in Educational Attainment in Rockland County, 2000-2008



Source: U.S. Census Bureau, 2000 Census of Population and 2008 American Community

3.7 Disabilities and Linguistic Abilities

As of 2008, some 23,100 residents of Rockland County – or 8% of the civilian non-institutional population – had one or more disabilities impairing their physical, mental, or emotional condition. Fully half of the persons with a disability were residents aged 65 years and over. A majority of others with one or more disabilities were of work-force ages, while fewer than 1,400 residents with disabilities were under 18 years of age.

Many more residents were linguistically challenged than physically, mentally, or emotionally disabled. In 2008, some 89,080 persons spoke a language other than English at home, and 40,300 of these residents spoke English less than “very well.” The primary language of nearly half of the non-fluent multi-lingual residents, some 19,400 persons, was an Indo-European language other than Spanish. Over the decade, their number grew by some 3,000 persons, or 18%. Primary Spanish speakers that are less than fluent in English also increased by 3,000 residents, but represent a smaller component of the linguistically challenged. Those with a primary Asian or Pacific island language are fewer in number, but also growing. Table 3.5 presents the top 10 foreign languages spoken at home by number of resident speakers, five years of age and over in 2000 and 2006–2008.

Table 3.5: Top 10 Languages Spoken at Home by Rockland Population Five Years and Over, 2000 & 2006-2008

TOP 10 FOREIGN LANGUAGES SPOKEN AT HOME - PERSONS 5 YEARS & OVER	2000	2006-2008	Change	
	Census	ACS	#	%
Spanish or Spanish Creole	24,218	31,853	7,635	31.5%
Yiddish	13,095	15,612	2,517	19.2%
French Creole	8,345	8,943	598	7.2%
Italian	3,842	3,691	-151	-3.9%
Tagalog	3,454	2,984	-470	-13.6%
Hebrew	3,294	2,935	-359	-10.9%
French (incl. Patois, Cajun)	3,185	2,484	-701	-22.0%
Russian	2,674	2,755	81	3.0%
Chinese	1,681	2,432	751	44.7%
Korean	1,659	1,788	129	7.8%

Source: U.S. Census Bureau, 2000 Census of Population, and 2006-2008 American Community Survey 3-Year Estimates

The rise in non-English speaking residents of Rockland has led to a greater number of linguistically isolated households.¹¹ In 2000, there were 5,394 households in which all household members 14 years old and over had at least some difficulty with English. By 2008, this number had grown to 7,382, rising faster than total households, to comprise 8% of all county households. Households in which English speakers are more limited are primarily those that speak Spanish or other Indo-European languages.

Table 3.6: Households of Rockland County by Linguistic Isolation, 2000 & 2008

LINGUISTIC ISOLATION	2000	2008	2000-2008	
	Census	ACS	#	%
Total Households by Household Language	92,744	94,687	1,943	2.1%
English	63,934	6,2826	-1,108	-1.7%
Spanish:	8,849	11,002	2,153	24.3%
Linguistically isolated	1,925	3,099	1,174	61.0%
Other Indo-European languages:	14,445	13,963	-482	-3.3%
Linguistically isolated	2,510	2,939	429	17.1%
Asian and Pacific Island languages:	3,687	4,237	550	14.9%
Linguistically isolated	711	1,228	517	72.7%
Other languages:	1,829	2,659	830	45.4%
Linguistically isolated	248	116	-132	-53.2%
Total Linguistically Isolated Households	5,394	7,382	1,988	26.9%

Source: U.S. Census Bureau, 2000 Census of Population, and 2008 American Community Survey

¹¹ A linguistically isolated household is one in which no member 14 years old and over (1) speaks only English or (2) speaks a non-English language and speaks English "less than very well."

3.8 Patterns of Settlement

Population growth has occurred throughout Rockland in the current decade, but several towns have grown faster than the County average, and villages have outpaced unincorporated areas as a whole. As shown in Table 3.7, growth has been greatest in actual numbers of residents in Ramapo and Haverstraw, which together accounted for 80% of Rockland’s population gain, while at the village level, New Square, Kaser, Haverstraw, and Spring Valley have attracted the most new settlement. Among villages attracting fewer new residents, Pomona and Montebello grew at a higher rate (10.1% and 8.6%, respectively) than Spring Valley (3%). Some villages have lost population, but most remain well below 10,000 persons.

Table 3.7: Settlement Changes in Rockland County Population by Town & Village, 2000-2008

	2000 Census	2008 Estimates	Number	Percent	% of Total County Growth
Rockland County	286,753	298,545	11,792	4.1%	100.0%
Clarkstown town	82,082	82,801	719	0.9%	6.1%
Haverstraw town	33,811	37,095	3,284	9.7%	27.8%
Orangetown town	47,711	48,421	710	1.5%	6.0%
Ramapo town	108,905	115,096	6,191	5.7%	52.5%
Stony Point town	14,244	15,132	888	6.2%	7.5%
By Village:	115,441	121,500	6,059	5.2%	51.4%
Airmont	7,799	8,339	540	6.9%	4.6%
Chestnut Ridge	7,829	7,871	42	0.5%	0.4%
Grand View-on-Hudson	284	285	1	0.4%	0.0%
Haverstraw	10,117	11,029	912	9.0%	7.7%
Hillburn	881	870	-11	-1.2%	-0.1%
Kaser	3,316	4,315	999	30.1%	8.5%
Montebello	3,688	4,007	319	8.6%	2.7%
New Hempstead	4,767	4,838	71	1.5%	0.6%
New Square	4,624	6,461	1,837	39.7%	15.6%
Nyack	6,737	6,833	96	1.4%	0.8%
Piermont	2,607	2,566	-41	-1.6%	-0.3%
Pomona	2,726	3,001	275	10.1%	2.3%
Sloatsburg	3,117	3,142	25	0.8%	0.2%
South Nyack	3,473	3,378	-95	-2.7%	-0.8%
Spring Valley	25,464	26,291	827	3.2%	7.0%
Suffern	11,006	11,088	82	0.7%	0.7%
Upper Nyack	1,863	1,891	28	1.5%	0.2%
Wesley Hills	4,848	5,043	195	4.0%	1.7%
West Haverstraw	10,295	10,252	-43	-0.4%	-0.4%
Unincorporated Areas	171,312	177,045	5,733	3.3%	48.6%

Source: U.S. Census Bureau, 2000 Census of Population & Population Division, 2008 Population Estimates Program

3.9 Projections of Growth

The Rockland County Planning Department, in partnership with Cornell University's Applied Demographics Program, prepared population projections of Rockland County to 2035. It is important to note that these County population projections are not predictions of future population size and composition, nor do they necessarily reflect desired population growth, but rather are projections illustrating the impact of recent rates of population change and demographic characteristic shares. Based upon these cohort-component projections, the County's population is expected to increase by 49,000 persons, or 17% between 2005 and 2035. This growth amounts to an increase of only 0.6% each year and yields a total population of 343,636 by 2035.

Over the 30-year period, Rockland's growth will be driven by the natural increase of 58,400 persons offset by the out-migration of 9,400 persons. Births are projected to number 145,800, or add 4,860 new children per year, while some 87,400 deaths are expected to occur across all age groups in the population. Although the number of out-migrants is relatively low over 30 years, significant inflows and outflows of residents will occur. The largest of these will arise from domestic in-migration or the arrival of residents from elsewhere in the U.S., totaling 234,000 persons. In contrast, some 296,000 Rockland residents are expected to depart, some for reasons of employment and education or the relocation to retirement destinations. The balance consists of nearly 53,000 new migrants from abroad who are expected to take up residence in Rockland County by 2035. At 1,760 persons per year, the level of new foreign immigrants will exceed the recent past influx of 1,350 persons per year between 2000 and 2008.

Significant shifts will also occur in the age structure of Rockland County's population. As the Baby Boom Generation continues to age, the corresponding cohorts will grow exponentially; those 65-74 increasing by more than 10,000 persons, or 52%, those between the ages of 75 and 84 increasing by 8,500, or 70%, and the elderly (85 or older) increasing by 4,700 persons or 103%. The increasing share of elderly population is balanced by an increase in those under the age of 20. Growing by 19%, the under-20 cohort is expected to expand by more than 17,500 persons between 2005 and 2035, while the Prime Labor Force Age group will lose members, decreasing by 1.2% over the 30-year period (See Table 3.8).

Table 3.8: Projected Population by Age Grouping, 2005-2035

Age Grouping	2005	2010	2015	2020	2025	2030	2035	Change 2005- 2035	Percent Change 2005- 2035
Under 20	90,604	91,559	92,682	95,229	98,880	103,599	108,156	17,552	19.4%
Young Adults (20-29)	30,737	32,881	34,571	35,130	35,355	35,629	36,244	5,507	17.9%
Prime Labor Force Age (30-44)	62,464	58,082	56,596	58,098	60,628	61,428	61,708	-756	-1.2%
Mature Labor Force Age (45-64)	74,407	80,094	81,770	81,450	79,009	77,254	77,750	3,343	4.5%
Early Retirement (65-74)	19,673	21,332	24,738	26,885	28,486	30,331	29,795	10,122	51.5%
Established Retirement (75-84)	12,194	13,267	13,674	14,963	17,574	19,364	20,727	8,533	70.0%
Elderly (85+)	4,557	5,385	6,204	6,628	7,028	7,843	9,256	4,699	103.1%
Total	294,636	302,600	310,235	318,383	326,960	335,448	343,636	49,000	16.6%

Source: The Rockland County Department of Planning; Cornell University, Program on Applied Demographics; U.S. Census Bureau, 2005 Population Estimates

Table 3.9 shows the population distribution percentages by age cohort from 2005 to 2035.

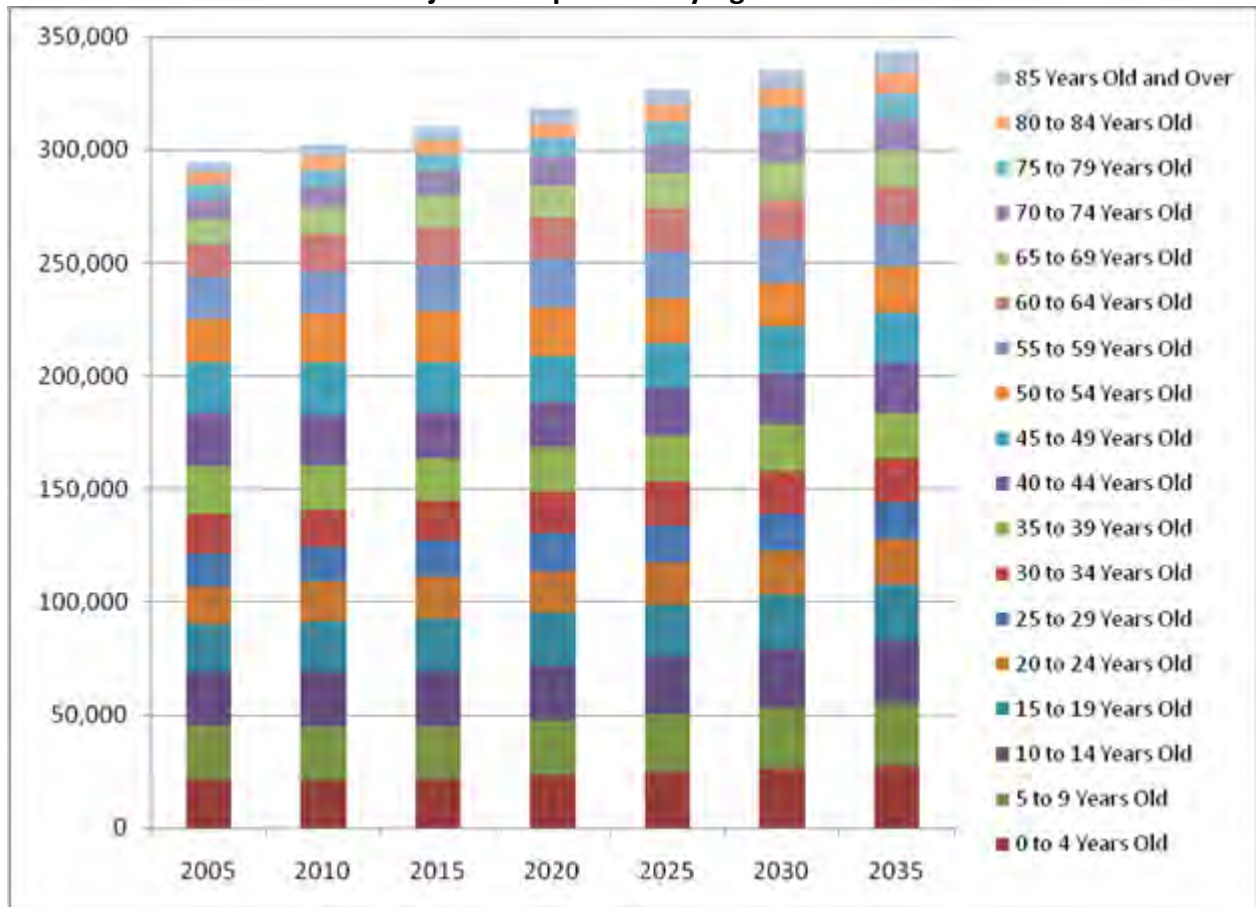
Table 3.9: Projected Population Distribution by Age Grouping, 2005-2035

	2005	2010	2015	2020	2025	2030	2035	Percentage Point Change 2005-2035
Under 20	30.8%	30.3%	29.9%	29.9%	30.2%	30.9%	31.5%	0.7%
Young Adults (20-29)	10.4%	10.9%	11.1%	11.0%	10.8%	10.6%	10.5%	0.1%
Prime Labor Force Age (30-44)	21.2%	19.2%	18.2%	18.2%	18.5%	18.3%	18.0%	-3.2%
Mature Labor Force Age (45-64)	25.3%	26.5%	26.4%	25.6%	24.2%	23.0%	22.6%	-2.6%
Early Retirement (65-74)	6.7%	7.0%	8.0%	8.4%	8.7%	9.0%	8.7%	2.0%
Established Retirement (75-84)	4.1%	4.4%	4.4%	4.7%	5.4%	5.8%	6.0%	1.9%
Frail Elderly (85+)	1.5%	1.8%	2.0%	2.1%	2.1%	2.3%	2.7%	1.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%

Source: The Rockland County Department of Planning; Cornell University, Program on Applied Demographics; U.S. Census Bureau, 2005 Population Estimates

Chart 3.4 presents the distribution of the forecast population by five-year age cohort.

Chart 3.4 Projected Population by Age Cohort 2005-2035



Source: The Rockland County Department of Planning; Cornell University, Program on Applied Demographics; U.S. Census Bureau, 2005 Population Estimates

3.10 Issues and Recommendations

The following section discusses a number of implications for Rockland County based on the recent demographic trends and population projections discussed in this chapter. While no specific recommendations are offered, this chapter outlines several broad suggestions for the County to consider. Because the projected growth in population for Rockland has potentially far-reaching consequences, it will influence a wide range of issues, and require specific courses of action, which are discussed in separate chapters of this Plan.

With growth concentrated in youthful and elderly ages over the 2005-2035 period, Rockland County can anticipate deterioration in the dependency ratio of economically active ages to youthful and retirement ages. In 2005, relative to persons under 20 and 65 years or older, the labor force-aged residents of 20 through 64 years represented 1.32 persons for every one youthful and retirement-aged person. By 2035, this ratio will have declined to 1.05 economically active persons for every one dependent aged person. However, many persons in early retirement continue to work, and many retirement-aged persons are financially secure. Nonetheless, it is generally acknowledged that society enjoys more resources when a larger share of the population is concentrated in prime and mature working ages.

The future implications of major demographic trends in Rockland County are numerous. They affect land use, transportation, housing, education, infrastructure, economic development, and community facilities. Specific policy recommendations relative to the impact of these trends will be discussed in subsequent related chapters. This chapter concludes with a brief overview of the recent past and likely future impacts by cohort groupings and functional areas.

By Cohort Groupings

Under 20 and Young Adults. The growth of population under 20 and young adults 20-29 will account for 23,000 new residents, or 47% of total growth over the forecast period. Driven by a modest expansion in the level of annual births that more than offsets the loss of young residents, the future youthful group will be more ethnically diverse than existing cohorts. These trends have implications for education and employment opportunities, as well as affordable starter housing.

Prime and Mature Labor Force. Between 2005 and 2035, residents of Rockland County in prime and mature labor force ages will hardly increase, expanding by fewer than 2,600 persons, or comprising 5% of total growth. Many residents between 30 and 65 can be expected to move out of Rockland County because their jobs or housing needs change. Others, including those in first home-buying ages (30-34 years), will be prevented from moving in because they cannot afford Rockland's housing costs. The limited expansion of prime and mature labor force ages among County residents could inhibit economic development efforts as businesses seek to locate in labor markets with depth and breadth in available work-force skills.

Retirement and Elderly Ages. The growth of population over 65 years of age will comprise the other major expansion in Rockland residents, adding more than 23,300 persons, or accounting for 48% of total growth. Although many retirement and elderly aged residents can be considered economically active and financially secure, this shift in age structure will demand many new resources focused on services for seniors. It has implications for assisted housing, transportation, health care and community facilities and is discussed further in **Chapter 4.0: Aging**.

By Functional Areas

Land Use. The pattern of future land use will need to address concentrated forms of development that accommodate the needs and desires of senior citizens for easy and secure access, and youthful householders for more affordable and interactive living.

Transportation. Investments in public transportation, highway and bridge improvements will need to serve the expanding ridership and traffic volumes associated with population growth. Among the youthful and elderly cohorts, more public transportation services will be required, including paratransit and school buses. Concentrated developments, including expanded villages, support the efficient use of public transportation services.

Housing. More diverse housing development is demanded by the expansion in youthful and elderly population. With a strong focus on affordable, workforce and moderate density housing, with more opportunities for rental and apartment living, the new stock should accommodate needs for public transportation, access to health care and community facilities, and in some cases assisted living. With extremely limited growth in home buying ages, Rockland's single-family housing market may not continue to increase significantly in value.

Education. Education is the key to a vibrant economy and community well-being. The growth in youthful cohorts will require substantial public and private investment across the range of lower-to-higher educational facilities. The growth in retirement ages and the elderly can also be expected to demand more educational services in the form of lifetime learning programs. An increasingly diverse population, from forces of natural growth and continued foreign in-migration, can be expected to require multi-lingual resources. To facilitate the transition of a youthful labor force to gainful employment, higher educational facilities need to bond more closely with Rockland County's employers.

Infrastructure. Development pressures will be placed on infrastructure systems that provide water, sewer, waste disposal, energy, and telecommunications services. Capacity expansions and system upgrades will be needed to accommodate new development and maintain the quality of service.

Economic Development. Job growth can be expected to occur in Rockland over the foreseeable future and many more residents will seek to work, as well as live, in the County. A major implication for economic development efforts will be the need for improvement in the match between resident skills and employer needs. As the prime and mature labor force fail to grow significantly, and older workers advance into retirement ages, emphasis will be placed on skill advancement among youthful entrants and retraining of existing workers.

Community Facilities. Community facilities of the villages, towns and County -- including library, youth and senior programs, parks and open space, and other facilities -- can be expected to experience increasing demands for services with population growth. Local government tax revenues may be under pressure to expand concomitantly, which may prove difficult to hold rates level without significant commercial or high-end residential development.

4.0 AGING

Throughout the region and the world, the elderly population is increasing in both actual numbers and share; the Baby Boom is becoming the “Elder Boom.” Global experts anticipate that this will strain the resources of federal, state, and local governments. As shown by recent history, as well as in cohort-survival model forecasts, this is also the case in Rockland County.

The total population¹ of Rockland County increased 4.1% to 298,545 between 2000 and 2008. According to the 2008 American Community Survey² (ACS), 39,348 persons, or 13.2% of Rockland’s population, is 65 years of age or over. The population aged 65 or older increased 16% from 33,853 in 2000 to 39,348 in 2008, four times faster than the population as a whole. This growth in the population aged 65 or older is not centered in any one community within Rockland, but instead is occurring throughout the County. Each of the five towns in Rockland has seen a growth in those aged 65 and older of at least 10% since 2000³. This compares with 13.4% in New York State and 12.8% in the nation as a whole. In addition, another 13.2% of the county’s population is between the ages of 55 and 64, and in the coming years will also require senior services.

4.1 Demographics

Gender

In most age cohorts, women tend to outnumber men in Rockland County; however the gender split of the aging population follows national trends. In the 65-69 age cohort, the sexes are roughly equal, with men outnumbering women by about 200 persons. However, after age 70, women begin surviving their male counterparts as they age, as is shown in Chart 4.1.

Race/Ethnicity

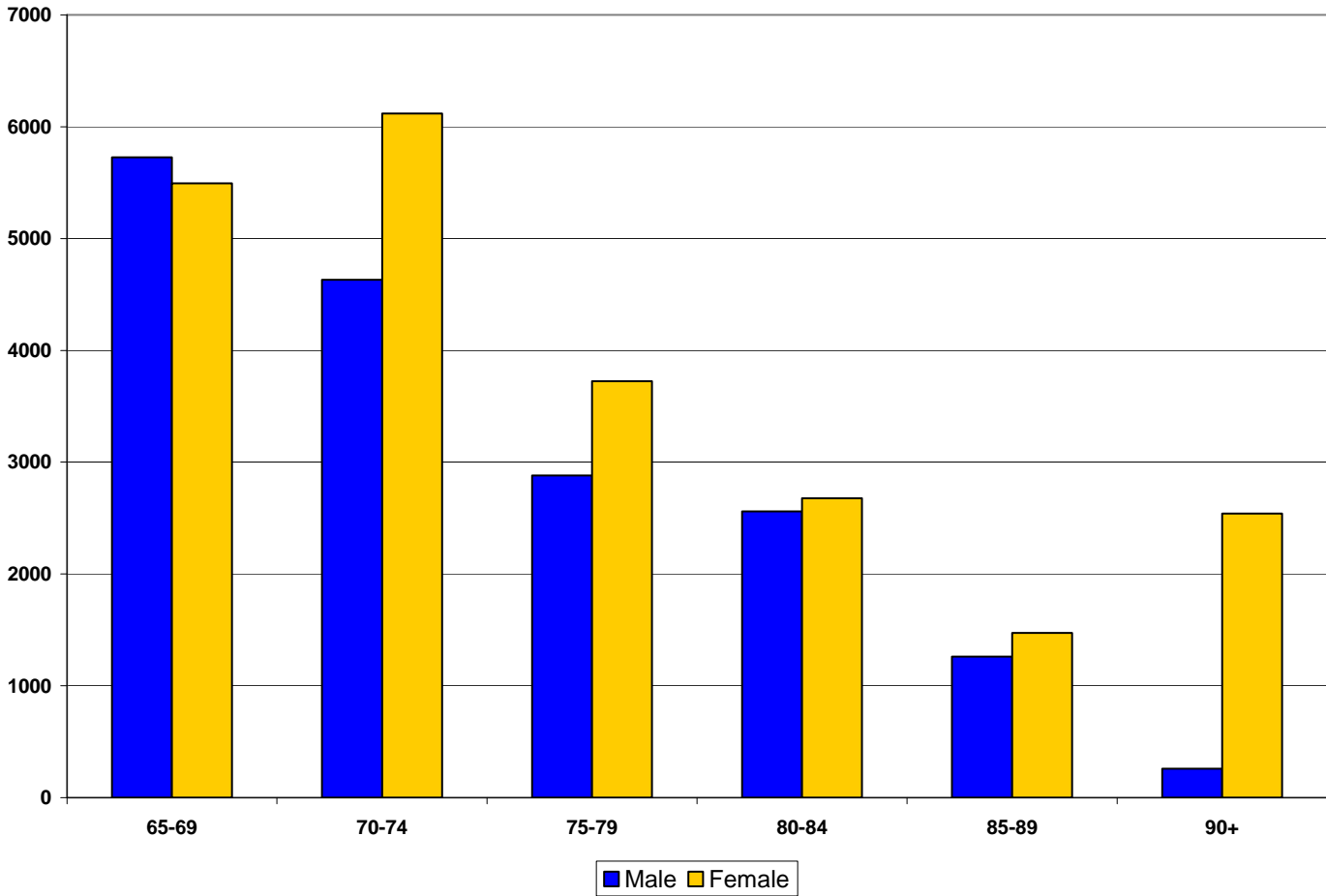
Rockland’s population over 65 years of age is more predominantly White non-Hispanic than the county as a whole (85% vs. 70%), ranging from 80% white in the 65-69 cohort to 95% white in the 90+ cohort (see Table 4.1, below). As new settlement and immigration patterns develop in Rockland County, the aging population will continue to diversify.

¹ Census Population Estimates for July 1, 2008.

² Unless otherwise stated, all data in this report were cross-tabulated from the 2008 ACS Public Use Microdata Samples (PUMS) for the two PUMS Areas (PUMA) that comprise Rockland County: PUMA 03601 and 03602. The results of these cross-tabulations differ slightly from the Census of Population Estimates by age; however use of the Microdata is required in order to establish the detailed characteristics of the population over the age of 65.

³ 2006-2008 American Community Survey 3-Year Estimates.

Chart 4.1: Gender Split by Age Cohort for Persons 65+, 2008



Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

Table 4.1: Mutually Exclusive Race/Ethnicity by Age Cohort 65+, 2008

Age	White Non-Hispanic	Black Non-Hispanic	Asian Non-Hispanic	Other Race Non-Hispanic	Two or More Races Non-Hispanic	Hispanic
Total 65 and Older	84.8%	7.5%	3.1%	0.0%	0.0%	4.6%
65 to 69	79.6%	10.8%	5.5%	0.0%	0.0%	4.2%
70 to 74	88.0%	7.3%	3.3%	0.0%	0.0%	1.5%
75 to 79	82.8%	6.3%	1.1%	0.0%	0.0%	9.8%
80 to 84	81.5%	6.0%	3.3%	0.0%	0.0%	9.3%
85 to 89	93.9%	6.1%	0.0%	0.0%	0.0%	0.0%
90 +	94.8%	2.8%	0.0%	0.0%	0.0%	2.5%
Total Population	69.9%	9.6%	5.5%	0.6%	0.5%	13.8%

Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

Language

A language barrier can make finding necessary services for the elderly more difficult. In Rockland County as a whole, 32% of residents do not use English as their primary language. For the population 65 and older, only 20% speak a primary language other than English.

Table 4.2: Top Eight Languages Spoken by the 65+ Rockland Population, 2008

	Total Persons 65+	Persons 65+ Who Do Not Speak English Well or At All	Share of 65+ Population	Percent Who Do Not Speak English Well or At All
English	31,311	0	79.9%	0.0%
Spanish	2,359	895	6.0%	37.9%
French	1,369	969	3.5%	70.8%
Russian	865	432	2.2%	49.9%
Italian	683	235	1.7%	34.4%
Yiddish	526	76	1.3%	14.4%
Hindi	511	0	1.3%	0.0%
Polish	482	433	1.2%	89.8%

Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

As Table 4.2 shows, Spanish is the second-most popular language among Rockland seniors at 6%, followed by French at 3.5%; Russian at 2.2%; Italian at 1.7% and Yiddish and Hindi, each with 1.3%. Of the most common languages spoken, only Spanish and Yiddish are more prevalent in the overall population than among the elderly, at 13% and 5.8%, respectively. It stands to reason that larger numbers of seniors will have these as their primary languages in the future.

Of those 65 or older who do not speak English as their primary language, 3,040 reported they do not speak English well or at all; the largest number, 969, speak French, followed by Spanish with 895. In percentage terms, those who do not speak English very well or at all include 90% of senior Polish speakers, 71% of senior French speakers and 50% of senior Russian speakers, who likely rely on a limited number⁴ of relatives and friends to help them communicate.

4.2 Household Formation

More persons over the age of 65 signify higher elder-care costs. Either working children of elderly parents will be providing services to protect or supplement their elders' income, or the County and municipalities will be paying for additional services. Household formation characteristics (with whom a person lives) are indicators of where the burden will lie and where support services will be needed. Of special interest are seniors living alone or with their children, as well as those who are the primary caregiver to their grandchildren.

Household Formation and Group Quarters

The vast majority (93%) of Rockland's seniors live in households; the remaining 7% live in group quarters. Group quarters may include institutional and non-institutional facilities such as group homes or nursing homes. As expected, the share of population in group quarters increases by age cohort. In the 65-74 cohort, only 3% of the population does not live in households. By the ages of 75 to 84, the

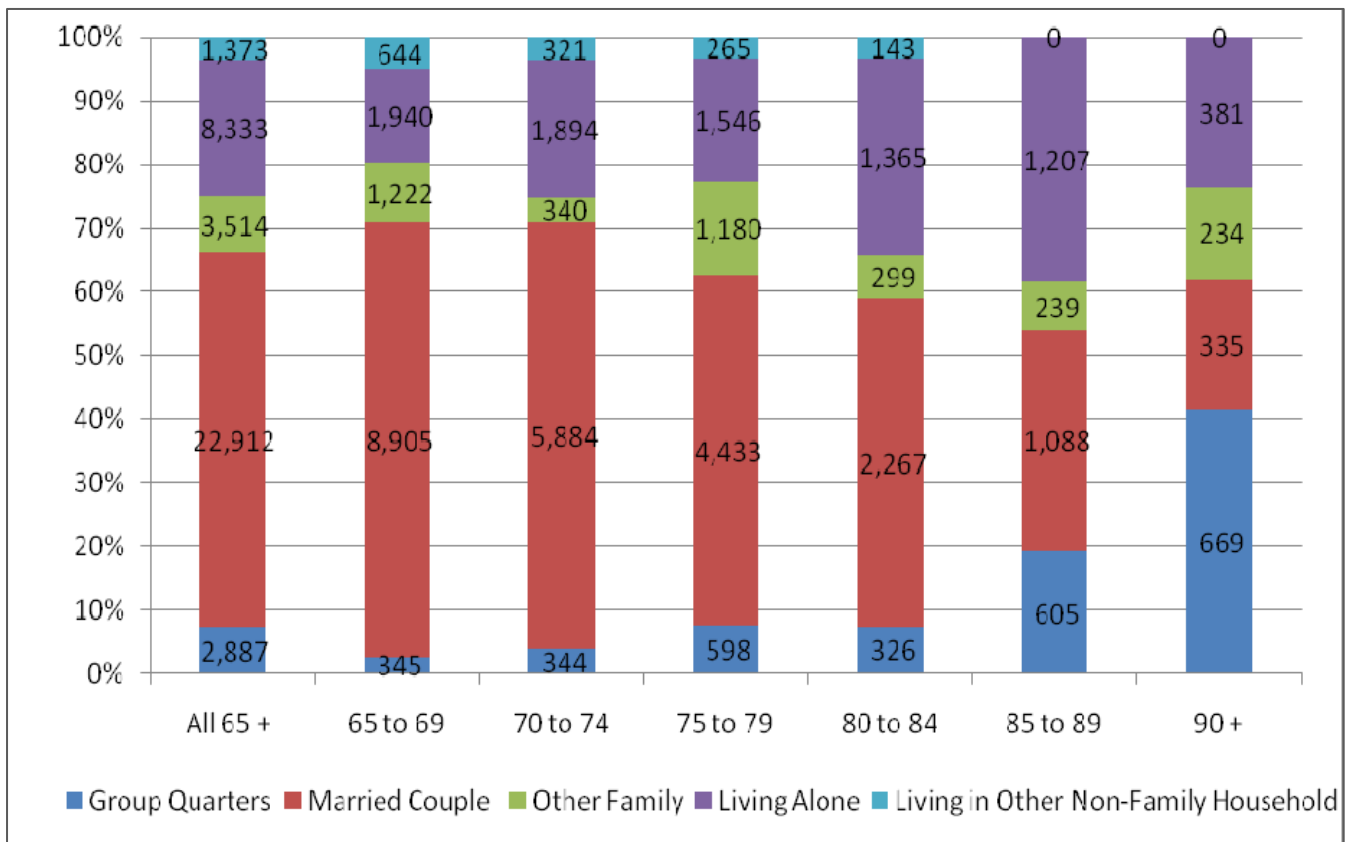
⁴ The number is limited due to the small size of their respective linguistic communities.

percentage living in group quarters has increased to 7%. For the 85 and older grouping, the share has increased to 27%. According to the 2008 ACS, 3,852 of Rockland’s seniors lived in non-institutional group quarters such as independent living facilities, while 1,445 lived in institutional group quarters such as nursing homes. As of 2010, the county’s nursing homes have an occupancy rate of 95%, so there is no current shortage of beds; however, as the population continues to age, nursing home facility expansion may be required.

Non-Family Households

Non-family households are defined as any single or multiple person living arrangement in which the members are unrelated. In Rockland County, 20% of the population over the age of 65 lives alone – comprising 5,560 women and 2,304 men. The share of persons living alone increases conversely to the decline in married couple family households as one partner outlives the other as shown in Chart 4.2. Persons 65 or over in multiple person non-family households number only 482, or 1.2%, of the senior population. These seniors share housing with an unrelated person.

Chart 4.2: Household Formation by Age Cohort for Persons 65+, 2008



Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

Family Households

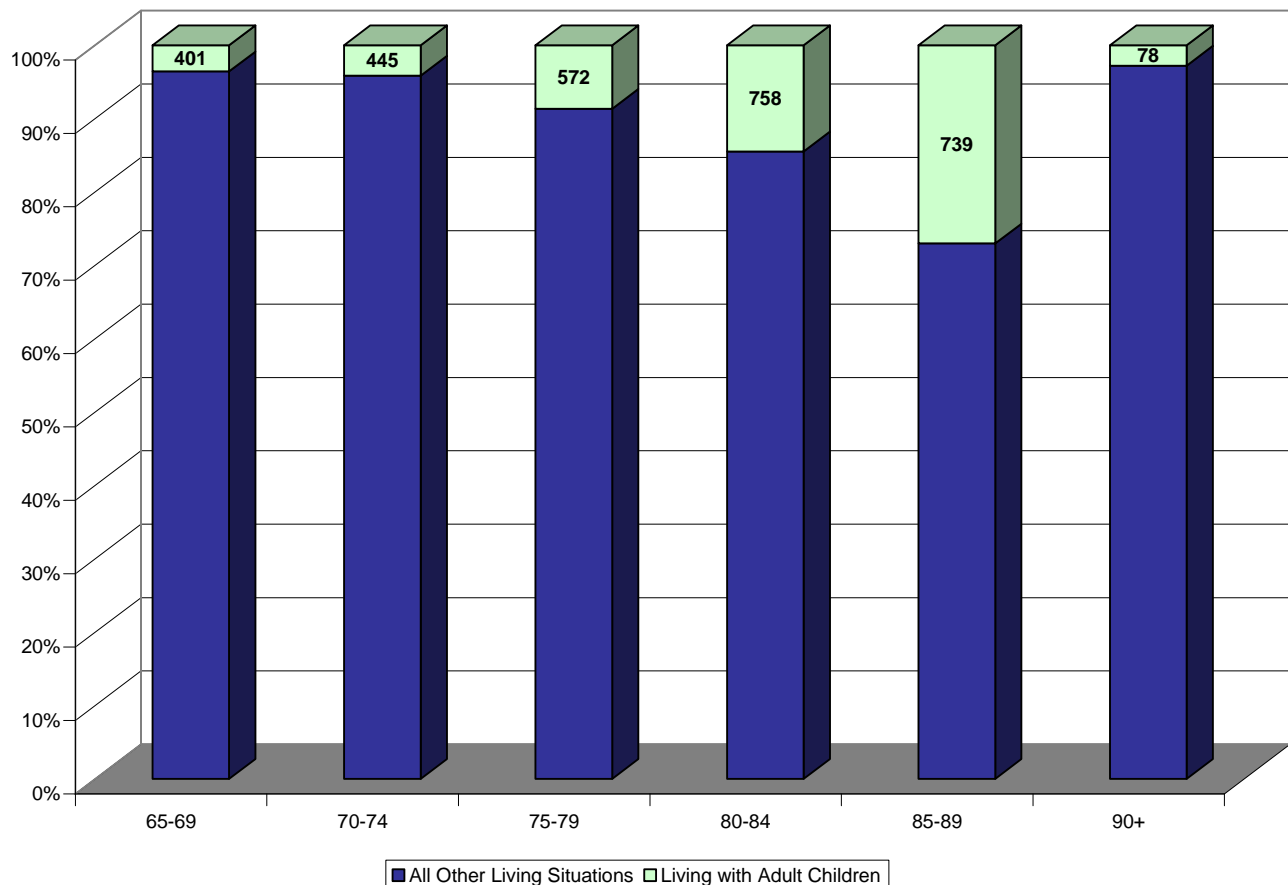
Overall, 58% of all Rockland County residents 65 years and over live with their spouse in a family household. This is highest in the younger age cohorts: 68% of persons 65-74 live in a married couple family household, followed by 55% for the 75-84 age cohort, but this drops sharply to 23% for over the age of 85.

Other family households include those with an unmarried person living with relatives. Family households with a female head, no husband present, represent a meager 4.2% share of all persons 65 and older. Senior members of family households with a male head, no wife present, are even less prevalent, at only 3.3% of all persons 65 and over in households.

Living with Adult Children

In 2008, almost 3,000 persons 65 or older reported living in their own adult child's household in Rockland County. This ranges from 3.6% of those between the ages of 65 and 69 to 27% of those between 85 and 89.

Chart 4.3: Share of Elderly Population by Age Cohort Living with Their Own Adult Children, 2008



Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

Chart 4.3 shows the share of total persons over the age of 65 by cohort, who live in their child's household versus all other living arrangements. As the age increases, so too does the percentage of the population living with their children, with the exception of those over the age of 90, who are either too frail or have children who are too frail to care for them at home. Overall, 14% of all persons over the age of 75 live with their children, creating a potential strain on household resources.

This strain is reflected in the United Way of Rockland County's *Assessing Human Services Needs in Rockland County, A Community Survey* of June 2006. The United Way Survey was not distributed using a scientifically valid methodology to a random sample of residents, but instead through community groups and agencies to special needs populations, so the survey results provide qualitative or anecdotal insight into the perception of need and should not be taken as scientific fact.

According to the United Way survey, 27% of respondents reported needing more help in caring for parents – a percentage higher than those who reported needing additional childcare. Almost one in three respondents said there is not enough care for seniors: 40% said they could not obtain home care for the elderly, 29% could not find nursing home care, and 27% could not find adult day care when needed.

Responsible for Grandchildren

Recent trends show that more and more mature Americans are taking on the social and financial responsibility of raising their grandchildren. According to the 2008 American Community Survey PUMS data, 7.4% of Rockland residents aged 65 or older live in a household with one or more grandchildren; however none of these are financially responsible for them. However, some 481 persons between the ages of 60 and 64, or 2.7% of that age cohort, are financially responsible for their grandchildren. Given the strength of this trend elsewhere in the region, the number of older persons caring for grandchildren should be monitored in order to accommodate the special needs of this sub-population.

4.3 Income and Poverty Status

Household Income

The median household income for the 20,098 households with heads aged 65 and older was \$50,247 in 2008. As would be expected, this is well below the County median of \$85,363.

Of Rockland County senior households, one in four had incomes that were less than \$25,000 in 2008, and another one in four had incomes between \$25,000 and \$50,000, as shown in Table 4.3. Another 23% had incomes between \$50,000 and \$100,000, while 27% had incomes of \$100,000 or more.

Table 4.3: Distribution of Household Income for Households with Head 65+, 2008

Income Range	Percent	Income Range	Percent
Less than \$10,000	5.6%	\$45,000 to \$49,999	4.0%
\$10,000 to \$14,999	5.3%	\$50,000 to \$59,999	5.2%
\$15,000 to \$19,999	9.1%	\$60,000 to \$74,999	6.9%
\$20,000 to \$24,999	5.7%	\$75,000 to \$99,999	10.7%
\$25,000 to \$29,999	4.4%	\$100,000 to \$124,999	10.4%
\$30,000 to \$34,999	5.3%	\$125,000 to \$149,999	3.9%
\$35,000 to \$39,999	6.1%	\$150,000 to \$199,999	7.5%
\$40,000 to \$44,999	4.3%	\$200,000 or more	5.5%

Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

Poverty

The ACS reports that the senior population living in poverty in Rockland County in 2008 was 7.3%, or 2,872 persons. This is a slightly higher share than the 7.1% of seniors in poverty in 2000, (2,411). The 2006 United Way survey indicated that seniors in Rockland are doing well compared with other subgroups in the county in terms of income and ability to pay bills for basic needs. However, 30% of survey respondents with households including members 65 years or older indicated they had difficulty paying for housing and legal help, 27% had difficulty paying utility bills, 23% expressed difficulties paying for clothing, and 19% for food. Of individual survey respondents 75 or older, 20% had difficulty affording health care.

Insurance

The 2008 ACS has included questions on insurance coverage in their survey. In Rockland County, 90% of the population reported having some insurance. For those 65 and older, that rose to 99%, likely due to the prevalence of Medicare (see Table 4.4). While the majority of the elderly population has some form of insurance coverage, the extent of coverage was not ascertained.

Table 4.4: Insurance Coverage for the Population 65 and Over, 2008

	Total Population	Uninsured	Insured	Percent Uninsured	Percent Insured
Total	299,200	29,849	269,351	10.0%	90.0%
Population Under 65	259,852	29,602	230,250	11.4%	88.6%
Population 65 and Over	39,348	247	39,101	0.6%	99.4%
65-69	11,221	0	11,221	0.0%	100.0%
70-74	10,749	176	10,573	1.6%	98.4%
75-79	6,603	71	6,532	1.1%	98.9%
80-84	5,240	0	5,240	0.0%	100.0%
85-89	2,735	0	2,735	0.0%	100.0%
90+	2,800	0	2,800	0.0%	100.0%

Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

4.4 Disability

According to the 2008 ACS, of Rockland's 65+ population, 34% report having at least one limiting disability. These could include mobility or personal care limitations, sight and/or hearing limitations or disabling memory problems, as detailed below. It should be noted that these are self-reported responses and are not based on a medical diagnosis of physical limitation.

In the age cohorts between 65 and 74, 17% of residents report having one or more disabilities; between 75 and 85, 44% report having a disability; for the population over the age of 85, the number reporting a disability almost doubles to 79%. In each age cohort, roughly half of the residents with a disability report having more than one identified form of disability.

As Chart 4.4 illustrates, of all those with one or more disabilities, 975, or 7.4%, live with their adult children, while just under 3,000, or 22% of mature persons with a disability, live alone. Disability compounds the need for senior services. In the 2006 United Way Survey, responses regarding the unmet demand for services were contradictory: 12% of respondents reported a need for services for the disabled, yet one in three of these reported that such services were, in fact, able to be located.

Forms of Disability

The American Community Survey asked residents if they suffer from four different types of disability: mobility limitations, self-care limitations, memory limitations, and difficulty seeing and/or hearing. Following is a discussion of the self-reported responses given by Rockland's elderly residents to the individual disability questions. Each form of disability is described individually below and it should be noted that one person might be counted under each of the four following categories.

Mobility Limitation

Mobility limitations are defined as an independent living difficulty that *indicates whether the respondent has any physical, mental, or emotional condition lasting six months or more that makes it difficult or impossible to perform basic activities outside the home alone. This does not include temporary health problems, such as broken bones or pregnancies.* These limitations affected 8,599 Rockland residents aged 65 and over. Of these residents, 18% lived alone and 8.3% were cared for by their adult children. Persons in the 65-74 cohorts were most likely to live alone, at 39%, while none reported living with their adult children. In the 75-84 and 85+ cohorts, those living alone only slightly outnumbered those living with adult children: 19% to 13% and 11% to 10%, respectively.

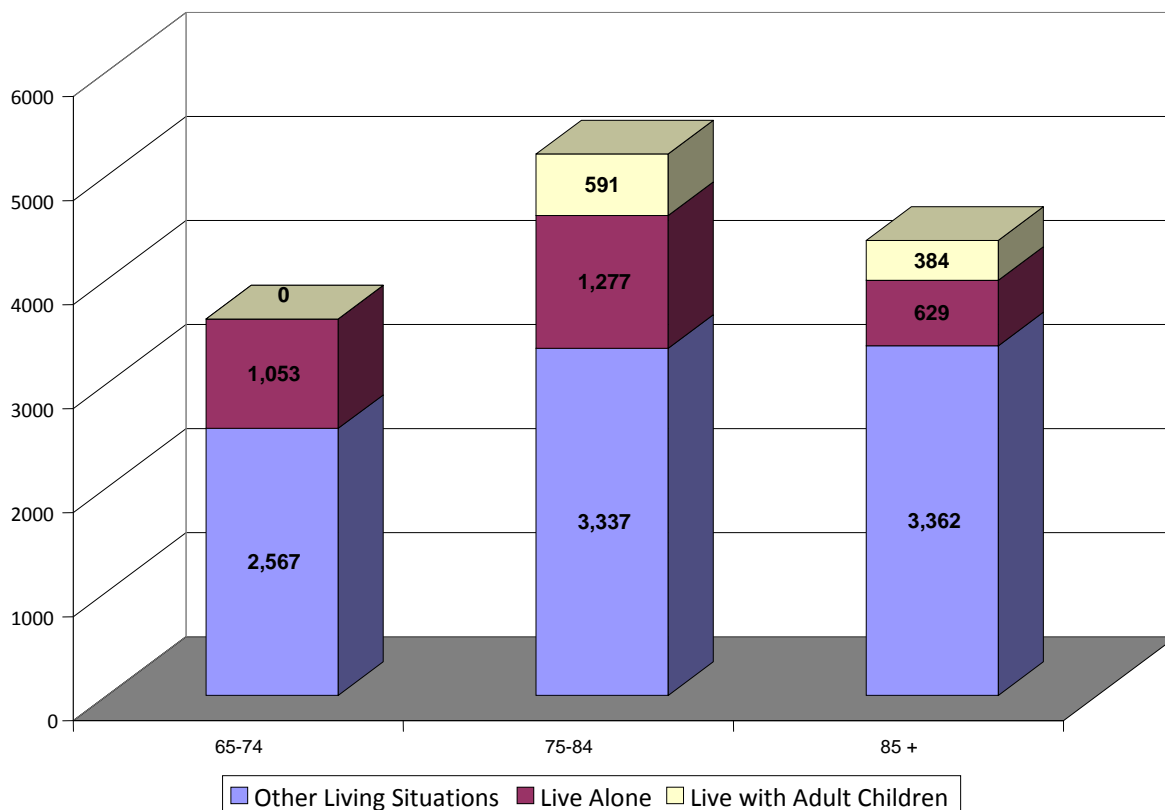
Personal Care Limitation

Personal care limitations are defined by the 2008 ACS as any permanent *physical or mental health condition that has lasted at least six months and makes it difficult for a person to take care of their own personal needs, such as bathing, dressing, or getting around inside the home.* These types of limitations were reported to the ACS by 22% of the population over the age of 65. This share of population ranged from 4.6% of the 65-74 cohort, to 83% of the 90+ cohort. While 1,524, or more than 15% of those with personal care limitations lived alone, 717, or 1.8%, all of whom are 85 or older, lived with their adult children.

Difficulty Seeing and/or Hearing

One in every five persons 65 or older stated they are blind and/or deaf by the following definition: *a long-lasting condition of blindness, deafness, or a severe vision or hearing impairment.*⁵ In the age cohort 65 to 74, only 7.7% reported this type of disability. However, between the ages of 75 and 84, those with these limitations increased to 30% of the cohort population. For those 85 and over, the instances increased to almost half of residents.

Chart 4.4: Persons 65 and Over by Disability Status and Select Living Arrangement, 2008



Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

Difficulty Remembering

Of Rockland residents 65 and older, 14% reported having cognitive difficulty, defined by the ACS as *any difficulty learning, remembering, concentrating or making decisions, because of a physical, mental, or emotional condition.*⁶

Like all of the disability categories, the instances of this disability increased dramatically with the age of the respondent: 4% of those 65-74, 16% of those 75-84, and 51% of those 85 or older. Of all persons 80 or older with difficulty remembering, 454 or one in every 10 lived with their adult children. Of all persons 65 or older who had a disabling cognitive capacity, 387 lived alone.

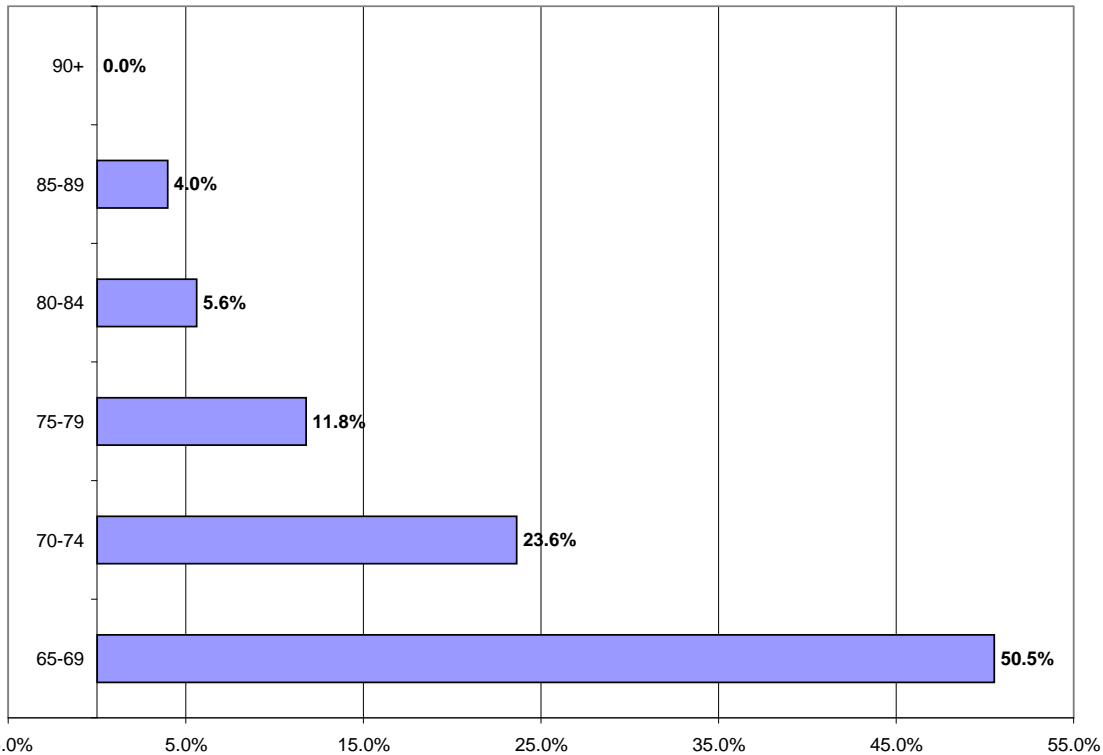
⁵ It should be noted that “long-lasting” is not defined.

⁶ Caution should be used in interpreting this information, as degree of difficulty is not defined.

4.5 Labor Force Participation

Almost one quarter of Rockland County's population 65 and over is still working. As shown in the figure below, over 50% of those between the ages of 65 and 69 are still in the workplace, followed by 24% of those between the ages of 70 and 74. In addition, 12% of those 75 to 79, 5.6% of those 80 to 84, and a small minority (4%) of those 85 to 89 still work.

Chart 4.5: Percent of Each Age Cohort Remaining in the Work Force, 2008



Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

Given the decline in younger work force numbers, as well as the “Elder Boom” and the subsequent strain on pension and retirement funds, it is likely that more and more people over the age of 65 will be remaining in the work force.

Occupation

The most common occupations of working Rockland residents age 65 and over are generally professional white-collar occupations and management positions, including those within the construction and finance industries. Table 4.5 shows the 10 most common occupations for working Rockland seniors.

Table 4.5: Top 10 Occupations of the 65+ Rockland Population, 2008

	Share of 65+ Working Population
Managers	6.6%
Bookkeeping, Accounting and Auditing Clerks	5.9%
Accountants and Auditors	4.1%
Secretaries and Administrative Assistants	4.1%
Supervisors/Managers of Non-Retail Sales	4.0%
Lawyers	3.8%
Physicians and Surgeons	3.8%
Construction Managers	3.6%
Elementary and Middle School Teachers	3.4%
Financial Managers	3.2%

Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

4.6 Housing Stock

Residents 65 and older own or rent 21% of all housing stock in Rockland County. This section provides a snapshot of current housing conditions. Fewer than one in four senior households are rentals, a smaller rate than the one in three rentals in the population at large. Multiple unit buildings can include rentals, cooperatives, and condominiums.

Structure Type

Of the 20,098 households headed by a person 65 or older in 2008, the majority, 58% (11,621), occupy traditional single-family detached houses, a slight decline in share from 2000, when 61% of senior households (11,810) were this housing type. The next most likely housing types for seniors are five- to nine-family apartment buildings (11%), three- to four-family buildings (6.3%), or two-family buildings (6.1%). Only 5% of senior households in 2008 were in structures that have 50 or more dwelling units, down from 7.7% in 2000. As seen in Table 4.6, there is no particular correlation between age of household head and structure type.

Table 4.6: 2008 Distribution of Senior Households by Structure Type, 2008

	Single Family Detached	Single Family Attached	2-Family Building	3-4 Family Building	5-9 Family Building	10-19 Family Building	20-49 Family Building	50+ Family Building	NA	Mobile Home
All 65+	57.8%	5.3%	6.1%	6.3%	10.6%	3.4%	3.5%	5.0%	1.3%	0.6%
65-69	57.0%	3.7%	3.4%	6.0%	14.8%	6.3%	3.1%	4.8%	0.0%	0.9%
70-74	59.0%	11.4%	7.6%	7.1%	7.6%	1.8%	3.4%	2.2%	0.0%	0.0%
75-79	59.2%	1.6%	7.2%	5.7%	6.4%	0.0%	3.6%	7.4%	7.5%	1.4%
80-84	63.0%	5.6%	2.6%	10.0%	9.8%	0.0%	7.0%	1.9%	0.0%	0.0%
85-89	46.3%	0.0%	9.2%	0.0%	14.7%	7.7%	0.0%	22.1%	0.0%	0.0%
90+	43.7%	0.0%	27.8%	0.0%	10.4%	10.1%	0.0%	8.0%	0.0%	0.0%

Source: U.S. Census Bureau, 2008 American Community Survey Public Use Microdata Sample

Value

The economic downturn and subsequent fall in housing values is not yet reflected in the American Community Survey data. In 2008, the average value of an owner-occupied housing unit, regardless of the age of the householder, was \$514,000, up from an average of \$509,000 in 2005. For households owned by seniors, the 2008 average value at \$529,000 was slightly higher than the county as a whole. This is 16% higher than the average senior-owned housing value in 2005. Future data releases should be monitored closely in order to ascertain the effect of the downturn on seniors.

4.7 Meeting Needs: Existing Housing and Services

Housing

Rockland County has an inventory of 18 subsidized senior housing complexes with a total of 1,834 units. Each of these complexes provides community activities and nutrition centers, while all have access to public and/or senior transportation services.

Affordable senior housing includes eight complexes with 894 units, two of which have community activities; one complex has a nutrition center, and seven of the eight complexes have access to fixed-route public transportation.

In addition to the complexes cited above, there are 18 adult or assisted living homes, six private senior homes (including those for active seniors), and nine nursing homes.

As the Baby Boomers continue to age, the demand for housing of these types will increase exponentially over the next 10 to 20 years. Careful consideration of where senior housing should be located is required to ensure Rockland seniors are afforded the opportunity to remain active and vital members of their communities.

Transportation

The ability to get out into the community to go to the store, to doctors, and to visit with friends and neighbors, is vital to maintaining happy and healthy residents. Thus, transportation services for seniors may be even more important to Rockland County residents than creating housing alternatives.

The Safe Older Driver Programs are an effort to keep seniors in their cars as long as possible, but once they have relinquished their car keys, seniors depend on rides from family and neighbors or the transit system. All local bus services have senior rates; there are also demand-responsive transportation services such as the T.R.I.P.S. public paratransit bus service, municipal senior bus services, and private medical transportation services. As many residents remain in their homes longer as they age, and as the aging population grows, demand for these customized transportation services is expected to continue rising at a dramatic rate. As meeting demand for these services has become an increasingly greater challenge, the Rockland County Office for the Aging has begun providing vouchers worth \$7 each way for a taxi ride to enable senior residents to travel to medical appointments.

The Rockland County Office for the Aging surveyed resident seniors in 2001, finding that 32% of respondents did not drive a car, 29% used public transportation, and 15% used the Rockland County T.R.I.P.S. public paratransit bus service. Demand for the T.R.I.P.S. service, in particular, has grown. In 2009 T.R.I.P.S. service averaged between 80 and 120 requests for service each day.

Along with expanding transportation services, preemptive planning for new senior housing is suggested: locating new buildings in village and town centers with sidewalks, shopping, doctors' offices, parks and other amenities nearby. The County and its municipalities must coordinate the targeted location of additional senior housing with the existing and future transportation modes and new routes.

Health and Recreational Services

The United Way Survey also asked respondents questions pertaining to health and recreational services. Many respondents indicated that these services were lacking and that there was a need for specific services. As the determination of unmet need for health and recreational services is based on the survey respondents' determinations that these services were unavailable, it is possible that the services were available, but the person in need did not know how to go about finding them.⁷ To the extent that these services were not available, the municipalities should coordinate their implementation.

Health Services

The perception of unmet need for health care and supportive services is one of the more disturbing results of the United Way Survey. Twelve percent of respondents indicated a need for home eldercare, yet two out of five of those in need found these services to be unavailable. Eleven percent of the respondents had a need for a nursing home, yet 29% of these were unable to find an available bed. Adult day care was cited as a need by 9% of those surveyed, but more than one-fourth were unable to find the services. Seven percent of respondents needed hospice care, and almost one out of every five had caregivers who left them alone.

Recreational Services

There is also an unmet demand for recreational services for seniors. While this demand may seem relatively unimportant compared to health care, transportation, and housing, it is not. At a Community Visioning Forum sponsored by the Rockland County Legislature and the Hudson Valley Chapter of the AARP in May of 2009, approximately 75 seniors, service providers, elected officials, and other interested stakeholders gathered to brainstorm about ways to improve the lives of Rockland County seniors. One of the most compelling topics explored at this Forum was what the participants agreed to call *The Life of the Mind*. Participants were all in agreement that one of the most significant components of successful aging is a healthy mind, and like maintaining a healthy body, a healthy mind needs regular exercise. Seniors should be encouraged to work on puzzles and other challenges that require utilization of their memory and reasoning skills. They should be provided with opportunities to express creative talents such as music, art, and writing, and local organizations that provide such opportunities should be encouraged to tailor certain classes and creative outlets toward older residents. In addition, libraries, colleges, and other institutions should be encouraged to provide affordable computer training classes for seniors, brain fitness courses and intellectual pursuits. Maintaining involvement in the community and avoiding isolation is key to keeping seniors happy and healthy as long as possible.

There are many senior recreation programs available throughout Rockland County, including county and municipal community and senior centers, senior clubs, municipal parks and recreation service senior programs, and continuing education programs at Rockland Community College and Dominican College. Yet 17% of survey respondents indicated they wanted additional social, recreational, and art activities

⁷ The County's InfoRock Information and Referral Call Center and website, United Way's 2-1-1 Information and Referral Service, the Rockland County Office for the Aging's website and the Bridges to Change directory, the collaborative effort with the United Women's Jewish Council- Rockland Section, are tools available to help residents find services, but additional outreach and communication may be necessary.

for seniors, yet one in every five of these was unable to find this type of activity. This indicates the County and municipalities should coordinate to market existing senior programs.

4.8 Planning for the Future

Consistent with recent national and local demographic patterns, the number of seniors in Rockland County is expected to grow in both actual numbers, as well as in share of the population from now until 2035, according to population forecasts prepared by the Rockland County Planning Department, in partnership with Cornell University's Applied Demographics Program. It is important to note that these population projections, which were informed by recent demographic patterns and local knowledge regarding Rockland's land use development, are not predictions of future population size and composition, nor do they necessarily reflect desired population growth, but rather are projections illustrating the impact of recent rates of population change and demographic characteristic shares. The forecast figures below (in Table 4.7) show an overall increase in Rockland's population between the years 2005 and 2035 of 49,000. Of that total increase, 23,354 (48%) will be 65 or older. This represents a growth for this population of more than 64% between 2005 and 2035, resulting in a population total of 59,778 in 2035, which would mean that, by 2035, 17% of Rockland's total population will be over the age of 65.

Table 4.7: Rockland County Population Forecast by Select Age Cohort, 2005-2035

	2005	2010	2015	2020	2025	2030	2035	Change 2005-2035	% Change 2005-2035
Total Under 65	258,212	262,616	265,619	269,907	273,872	277,910	283,858	25,616	9.9%
Total 65+	36,424	39,984	44,616	48,476	53,088	57,538	59,778	23,354	64.1%
65 - 69	10,794	12,105	14,347	14,530	15,903	16,577	15,512	4,718	43.7%
70 - 74	8,879	9,227	10,391	12,355	12,583	13,754	14,283	5,404	60.9%
75 - 79	7,162	7,341	7,642	6,854	10,346	10,620	11,606	4,444	62.0%
80 - 84	5,032	5,926	6,032	6,309	7,228	8,744	9,121	4,089	81.3%
85 & Over	4,557	5,385	6,204	6,628	7,028	7,843	9,256	4,699	103.1%
Total Population	294,636	302,600	310,235	318,383	326,960	335,448	343,636	49,000	16.6%

Source: The Rockland County Department of Planning; Cornell University, Program on Applied Demographics; U.S. Census Bureau, 2005 Population Estimates

The rate of increase will be greatest in the cohorts requiring the most care: those 80 years or older. The 80-84 age cohort is expected to grow by 81% between 2005 and 2035, while the 85 and over cohort is expected to more than double, increasing by 103%. Along with the needs of the existing population, the demands of this rapid population shift must be addressed.

4.9 Issues and Recommendations

The increase in actual number and share of the population over the age of 65 will have fiscal ramifications on Rockland County. Increasing numbers of seniors, and especially those seniors over the age of 80, will affect transportation, services, and housing needs in particular.

Transportation and Transit

The ability to get around is one of the greatest concerns of the aging population according to the United Way Survey, the *Good to Go* AARP conference and the *Project Tomorrow* study. As seniors give up their cars, they will depend more and more on fixed-route TOR and T.R.I.P.S. paratransit services provided by the County. The increasing demand may require reconfiguring bus routes, expanding fleets and increasing the number of drivers, as well as coordinating the town transportation systems and County routes for greater coverage. Providing a network of sidewalks for safe pedestrian travel is vitally important to enable seniors to take walks for local trips and to access bus stops for longer trips.

Housing

Many older residents wish to stay in their own homes or, at the very least, remain in the community where they have spent their lives. For some, staying at home may not be possible because health and mobility problems will require outside care. Other seniors may wish to downsize or are unable to maintain a single family home. Still others may not be able to afford to pay their property taxes any longer. Regardless of the cause, these seniors will require housing opportunities suited to their changing needs, be it smaller, more affordable houses or apartments, or housing in a location within walking distance to convenience shopping, doctors' offices and recreation.

Services

The expected increase in the number of seniors will mean an equal increase in the demand for services from the Office for the Aging. In light of increasing energy costs and the number of seniors who are outliving their retirement savings, the Home Energy Assistance Program can expect ever-increasing demand. National Health Care Reform will initially expand the workload of the Health Insurance Information, Counseling and Assistance program as new system requirements are worked through. Finally, the extended life expectancy of many of our seniors will lead to increased demand from the Expanded In-home Services for the Elderly Program and caregiver respite programs.

Meeting exponentially increasing demand while revenue streams are decreasing throughout the State and County will require continued creativity, initiative and strategic thinking.

Labor Force

Rockland's workforce will be affected by the increasing senior population as well: not only will more seniors be remaining in the work force longer, potentially requiring new job training and transitioning education, but new employment opportunities will arise for all workers, especially those in the ever-expanding health and home-care fields.

Rockland County has already begun efforts to help the senior population remain vital, provide care to those who are failing, and to help their caretakers, as demonstrated by the two-year study by the Rockland County Legislature *Project Tomorrow: Aging in Place*⁸, the AARP Good to Go conference, and

⁸ The complete report is available at <http://198.106.27.30/Legislature/ProjectTomorrow.htm>.

the focus on the aging mandated in this comprehensive plan. Further efforts must be undertaken to meet the needs of the County's aging residents. Many of the goals may be achieved by adopting a vision that will lead to "Livable Communities" for ALL ages.

Recommendations

Seniors have a number of housing options, ranging from traditional nursing homes to assisted-living facilities, from single-family homes to condominiums and apartments. Many seniors, if they are able, wish to remain in their homes, so that they can continue to live near family and friends and be a part of their community. Yet typical suburban single-family homes are not ideally situated for the elderly. Reaching necessary services and amenities often requires traveling by automobile; because many seniors no longer drive, this situation can lead to feelings of isolation and loneliness. Successful aging in place may require changes in land use, transportation, and community resources, so that seniors are able to fully participate in the community and maintain dignity, independence, and quality of life. Each of the following recommendations is a strategy to encourage successful aging in place.

Recommendation #1: Support Affordable Housing Options in Strategic Locations

As discussed in **Chapter 10.0, Housing**, as baby boomers continue to age over the next 10 to 20 years, demand will increase for housing communities that offer residents a lifestyle specific to the needs and preferences of the aging population. Careful consideration of where senior housing should be located is required to ensure seniors can remain active and vital members of their communities. For example, developing senior housing in or near existing village and town centers can allow residents who cannot or choose not to drive to carry out day-to-day activities – including trips to the store, the doctor's office, the library or the neighborhood park – without relying on an automobile. Proximity to a downtown area also offers seniors more opportunities to participate in community associations, cultural activities or attend local events.

Recommendation #2: Encourage Zoning that Addresses Senior Housing Needs

Senior housing needs are best addressed at the local level through zoning regulations that permit moderate- to higher-density development, and that offer a density bonus in exchange for a set-aside of new age-restricted units. Regulations should also require builders of senior housing units to construct pickup zones to allow transit buses to enter and turn around without backing up, per Federal regulations. Many residents have expressed the hope that new construction of multi-unit housing will include designation of certain buildings as non-smoking residences to avoid health risks. Some municipalities in Rockland have already begun addressing senior housing needs through zoning amendments. Although the County lacks the authority to dictate changes to local zoning and land use regulations, it can encourage towns and villages to adopt zoning amendments that address the needs of their respective elderly residents. Municipalities that have already incorporated senior housing components into their zoning codes could serve as model local laws for other communities to facilitate affordable senior housing development.

Recommendation #3: Create Intergenerational Housing Opportunities

Inter-generational living, which is the preference of many families, should be an alternative option to senior-only communities. This can be accomplished through new affordable living communities for all ages or by permitting greater flexibility in modifying existing single-family houses for "mother-daughter" or other two-family homes.

Recommendation #4: Facilitate Modification of Existing Homes

Whether it is to turn an adult offspring's home into a "mother-daughter" or to create a safer, more elder-friendly environment in the home a senior has resided in for many years, providing affordable access to home modifications must be a priority. Such modifications include the widening of doorways and the installation of ramps, chairlifts and bathroom rails. In the case of "mother-daughters," they may also include the addition of a second master bedroom suite and kitchen area. An accident or injury can turn an otherwise active senior into one in need of care. It is important to know that fall prevention and injury avoidance should be a prime consideration in building new homes or modifying older ones. Interested seniors should be provided information on eligible grants for such modifications. Additionally, municipalities should be urged to review their zoning codes to determine if revisions can be made to provide greater flexibility in home modifications to accommodate the needs of older residents.

Recommendation #5: Increase Mobility Options

Seniors living independently need to have a full range of mobility options to reach their destinations without having to drive themselves or depend on someone else. The County should explore expanding transit alternatives aimed at seniors, perhaps through establishing rideshare or volunteer transportation programs. Such programs potentially could be coordinated with nonprofits within the county at minimal cost. Efforts should also be made to better inform seniors of transit options already available to them, such as the T.R.I.P.S. service and TOR bus system. To accommodate the needs of seniors and others in wheelchairs who must travel into New York City for medical appointments, bus operators should be encouraged to provide service that includes wheelchair accessibility. See ***Chapter 13.0: Services and Information Resources*** for a discussion on compliance with the Americans with Disabilities Act of 1990 (ADA).

Municipalities should evaluate areas near senior communities and shopping centers that tend to attract senior pedestrians and determine if there are adequate sidewalks available. When accessible, well-maintained sidewalks are available, seniors will feel more comfortable in making short trips into their surrounding areas.

Recommendation #6: Create Vibrant Public Spaces for ALL Residents

To help seniors remain involved in the community, the County and its municipalities should create vibrant public spaces facilitating interaction. Planning for new or renovated parks should take the needs and preferences of the elderly into account. Communities should continue to provide well-run community centers, recreation facilities, parks, and other places where all ages can socialize and become civically engaged. Many seniors wish to remain active and contributing members of the community, and studies have shown that such involvement leads to marked improvement in their overall well-being. Governments should work with nonprofit organizations to ensure that opportunities are provided for seniors to volunteer their time to worthy causes. For example, seniors can work in libraries, mentor young people, and provide companionship to other seniors who may be home-bound. In partnership with these organizations, governments can tap into the resource that seniors represent by expanding outreach for community volunteer programs to seniors and mentoring by seniors to target groups. The County and local governments should also continue to offer supportive community features and services, regularly seeking feedback from the senior population to ensure that their needs are being met.

Recommendation #7: Ensure Safety and Security

The County and its communities should ensure safety and security for all residents through such diverse actions as complete streets policies which include retiming traffic signals to allow pedestrians more time

to cross streets, maintenance of sidewalks, well-maintained bus shelters with seating, improved lighting and signage, and supporting the TRIAD initiatives to warn seniors about criminals and scams that target older residents, as well as the Silver Alert program that enables law enforcement agencies to issue public alerts when seniors with dementia go missing. Ongoing attention will be given to educating the public. Seniors must feel safe and supported whether in their homes, or out in their community.

Recommendation #8: Continue Employment Services and Job Skills Development for Seniors

The Office for the Aging currently provides employment services and labor force development training for local seniors. It is important that these efforts continue to be coordinated with other local stakeholders, including the Rockland Community College offerings, and tied in to work-force needs of employers. The Office should also coordinate with the Rockland County Workforce Investment Board (WIB) to develop programs targeting seniors. The WIB currently offers programs for young adults (aged 17-21) and veterans, but does not appear to provide services expressly aimed at older residents.

Recommendation #9: Enhance Efforts to Inform Seniors and their Family Members about Existing Services and Resources

Rockland County and its municipalities have a wealth of resources for seniors and are continuing coordination efforts. *Project Tomorrow: Aging in Place*, an initiative of the Rockland County Legislature, is creating Rockland's own holistic vision for livable communities for seniors, incorporating all of the aspects of life listed in the goals above. Keeping to this vision, the County should continue to enhance the cooperation between public agencies and private organizations, making certain that all stakeholders – both seniors and those who care for them – know what services and opportunities are available to them. These measures will ensure that seniors remain an integral part of the Rockland communities they helped to create. It is essential that outreach integrate several types of media including flyers for mailings, newspaper advertisements (for senior center seasonal program announcements) and online postings.

Maintaining an online presence is becoming vital to the success of any program. While some seniors remain hesitant about using the Internet, their adult children and grandchildren are likely to be proficient at seeking most of their information online. Most Rockland senior program web postings provide addresses and phone numbers to call for program information; however most working adult children of the aging lack the time and/or privacy to call for information during standard office hours. For this reason, these pages should also detail classes and events and accept requests for additional information via mail or email. These sites can be developed at very little cost: registering a domain name is as low as \$20 a year; there are user-friendly free web development sites such as Weebly.com; and labor could come from a volunteer, or via an internship for credit arranged with local colleges.

Recommendation #10: Provide Intellectual Opportunities for the Aging Population

As described earlier, the *Project Tomorrow* study focused attention on what was referred to as “Life of the Mind,” because one of the most significant components of successful aging is a healthy mind. Providing opportunities for seniors to exercise their brains needs to be a priority for government agencies and private organizations that provide services for seniors. Opportunities should be provided for seniors to explore creative endeavors such as music, art, and writing. Computer training classes and other intellectual pursuits are important to keeping seniors involved in the community and avoiding isolation – key to ensuring that seniors are happy and healthy as long as possible. The County and its municipalities should coordinate marketing efforts of existing senior programs.

5.0 LAND USE AND ZONING

The built environment – the type, location and intensity of existing land uses – defines the character of a county and its municipalities. Understanding how land is devoted to residential, commercial, industrial, open space and other uses, and the locations of vacant and underutilized land, are key steps in developing a future vision. Analyzing individual properties and specific land uses on a countywide level is not feasible, but an evaluation of overall densities and generalized land uses can yield a useful picture of prevailing patterns and identify potential issues and opportunities.

On a local level, municipalities' zoning and land use regulations are the central tools for controlling land development. Rockland County does not have jurisdiction to direct allowable land uses through zoning; however, a countywide land use plan can guide, influence and shape future development to ensure that it is consistent with the existing community character and meets countywide and regional goals and needs. A county land use plan can also serve to identify local land use conflicts and take a “big picture” approach to larger-scale issues such as regional infrastructure, traffic and transportation, water quality and quantity, drainage, and the environment – issues that cannot be fully addressed at the local municipal level. The plan can also be referenced in the County's General Municipal Law (GML) reviews, which are one of the most important advisory tools of the Rockland County Department of Planning in guiding and influencing development in the county.

5.1 Historic Growth Patterns and Existing County Land Use

As in many areas located within a larger metropolitan area, Rockland's early development was established by agriculture and localized industry, which gave rise to modest suburban expansion. From the early 20th Century on, the county's population grew with expansion of its rail, and later its road systems. Development that had been centered on villages, rail lines and historical transportation routes such as the Ramapo Pass, the Nyack Turnpike (now Route 59) and the Hudson River became more dispersed with the construction of Route 9W in the 1930s and the Palisades Interstate Parkway, Tappan Zee Bridge and New York State Thruway in the 1950s. This shift more closely linked Rockland with the greater region and led to the development of major growth corridors such as I-287 and Routes 9W, 17, 45, 202, 303, 304, 306, and 340.

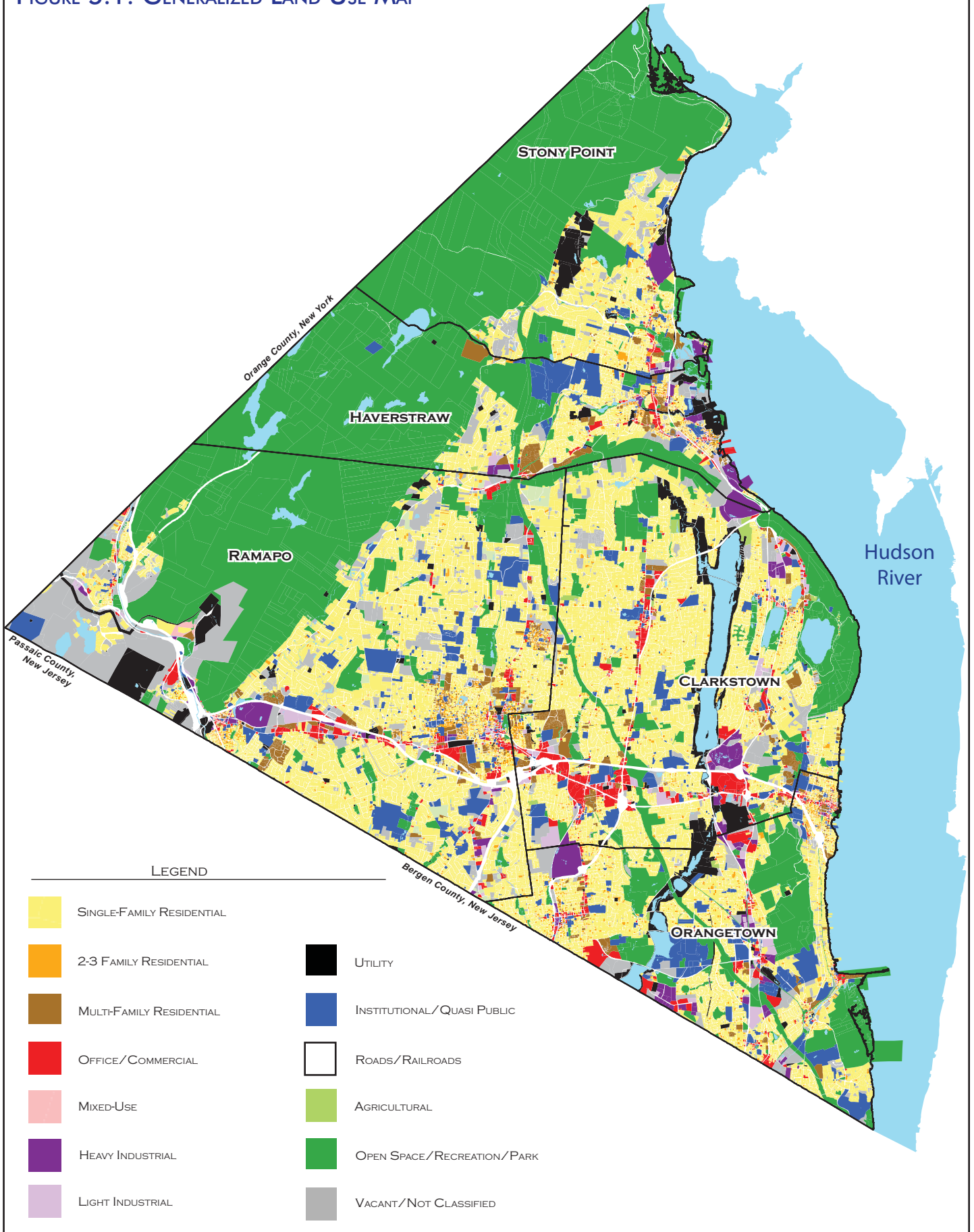
Today, land uses in Rockland County range from traditional mixed-use, relatively dense village and hamlet centers to lower-density suburban residential areas, from regional shopping centers to light industrial parks (see Figure 5.1). As shown in Table 5.1, parkland is the single largest land use, comprising just over one-third of the county's total land area of 176 square miles. Most of this preserved open space consists of New York State parks in the northwestern portion of Rockland and a series of interconnected green spaces along the Hudson River that together comprise a 33-mile stretch that is intertwined with the Long Path regional hiking trail. Parkland and open space also include the Palisades Interstate Parkway, a Scenic Byway and Natural National Landmark. The Parkway is classified as open space because, unlike other roadways, it was not established as a right-of-way but consists of separate parcels providing access to and among a network of parks and open spaces and links residents to the parks. In addition, the parkway provides extensive landscaping and protection of scenic views. Other open space – local parks, open spaces, private recreation areas and water areas – totals approximately 8% of the County, making the total amount of open space 39% of its total land area.

Single-family residences make up the largest category of developed land uses, representing more than 28% of the total land area in Rockland County. Pockets of medium- and higher-density residential uses,

consisting of two- and three-family housing and multifamily housing (including senior housing), are located primarily in village centers and along major roadways throughout the county, and together comprise approximately 3% of the land area. Commercial and business uses, including both regional commercial developments, such as the Palisades Center Mall, and “local neighborhood” uses found in village centers and downtown areas, make up just over 2% of the total land area. Like the higher-density residential and local neighborhood business uses, the mixed-use category, which contains both residential and commercial uses, occurs mainly in traditional village areas.

Industrial uses in the county have not occupied as much land area as had been anticipated by the 1973 Rockland County Master Plan, but these uses comprise approximately 2% of land area, mainly along the major thoroughfares of Routes 59, 303 and 304, and in older industrial areas on the Hudson River. Institutional land uses are found throughout the county and make up nearly 6% of the total land area, while land that is either vacant or not yet classified represents another roughly 7%.

FIGURE 5.1: GENERALIZED LAND USE MAP



LAND USE AND ZONING

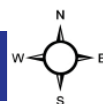


Table 5.1: Countywide Generalized Land Uses

Generalized Land Use Classifications	Acreage	Percent
<i>Residential</i>		
One-Family	32,832	28.7
Two-Family	1,307	1.1
Three-Family	189	0.2
Multifamily	2,160	1.9
Multifamily – Senior Housing	205	0.2
Total	36,693	32.1
<i>Commercial/Office</i>		
Local Neighborhood	288	0.3
General Business	1,349	1.2
Regional Commercial	233	0.2
Office	622	0.5
Total	2,492	2.2
<i>Mixed Use</i>	119	0.1
<i>Industrial</i>		
Light Industrial/Warehouse	871	0.8
Heavy Industrial	1,845	1.6
Total	2,716	2.4
<i>Institutional/Quasi-Public</i>	6,319	5.5
<i>Utilities/Transportation</i>		
Utilities*	3,445	3.0
Railroad	379	0.3
Roadways	9,023	7.9
Total	12,847	11.2
<i>Agricultural/Parks/Open Space</i>		
Agricultural	475	0.4
Public Park/Open Space	34,747	30.4
Local Park/Open Space	3,441	3.0
Private Recreation/Private Open Space	2,614	2.3
Water	3,294	2.9
Total	44,571	39.0
<i>Other</i>		
Vacant	8,349	7.3
Not Yet Classified	145	0.1
Total	8,494	7.4
TOTAL	114,251	99.9

Source: Rockland County Planning Department, 2009

1. Land use based on 2008 RPS databases (PCC codes), ongoing field verifications and 2007 orthophotos. Land use calculations do not include any areas underwater in the Hudson River.
2. Acres based on GIS calculations, rounded to the nearest whole number.
3. Geography based on 2008 tax map parcels. Water category based on lakes and County-regulated streams.
4. The Palisades Interstate Parkway (PIP) is classified as parcels and not as rights-of-way, and is thus reflected in the public park/open space totals rather than the roadways.

*Includes Lake DeForest, a County reservoir.

5.2 Municipal Land Use

Rockland County's five towns – Clarkstown, Haverstraw, Orangetown, Ramapo, and Stony Point – each face a different set of land use patterns and issues. Within the town boundaries are the villages and hamlets, many of which offer a more traditional, downtown character, distinct from the towns which contain them, and reflecting the unique history and development of the villages and hamlets. Figure 5.2 illustrates each of the towns and villages, together with their dates of incorporation.



The hamlet of Nanuet has its own Metro-North station.

Source: BFJ Planning, 2010

Clarkstown

Clarkstown, located immediately north of Orangetown and east of Ramapo, is composed of the hamlets of Bardonia, Central Nyack, Congers, Nanuet, New City, Rockland Lake, Valley Cottage and West Nyack; the Village of Upper Nyack and portions of the Villages of Nyack and Spring Valley. The town's hamlet centers – which typically have higher-density residential uses and neighborhood commercial uses that primarily serve residents of the immediate surrounding area – are situated in close proximity to State roadways. Although the majority

of Clarkstown is developed as residential, the town has emerged as the county's commercial center, especially along the Route 59 corridor, due to the presence of the Nanuet and the Palisades Center Malls, as well as office and business uses along Routes 59, 303, and 304. The Rockland County seat, New City, makes up about 40% of Clarkstown's population, and its government center is a major regional employment node. The town also boasts cultural and historic attractions, such as the Rockland Center for the Arts, Blauvelt House, and the Rockland County Courthouse and Dutch Garden.

Rockland Lake State Park, Hook Mountain State Park, Nyack Beach State Park, and portions of High Tor State Park roughly ring the northern and eastern fringes of Clarkstown, with Town parkland dispersed throughout the municipality. County parkland supplements the northern and southern parts of the town, preserving important natural features. The town's major water bodies, in addition to the Hudson River waterfront, are Rockland, Swartout, and Congers Lakes and Lakes Lucille and DeForest. Water bodies make up 6% of Clarkstown's land area, while public and private open space areas represent nearly 15%. Clarkstown is also home to some of Rockland County's most actively used recreational facilities, such as Rockland Lake State Park, Kennedy Dells Park, and portions of the Long Path.

While most of Clarkstown's 41 square miles has either been developed or preserved as open space, there are large vacant parcels between Old Haverstraw Road and Route 303 (north of County Route 80), along the northern and western portion of the town, and adjacent to the watershed lands of Lake DeForest. Many large parcels within the town are comprised of institutional/quasi-public land uses, such as schools or religious facilities, as well as industrial uses such as quarries. Future needs may result in potential redevelopment options, such as changes to existing land uses and the reuse of the quarries once their aggregate supply has been depleted.

FIGURE 5.2: TOWNS & VILLAGES

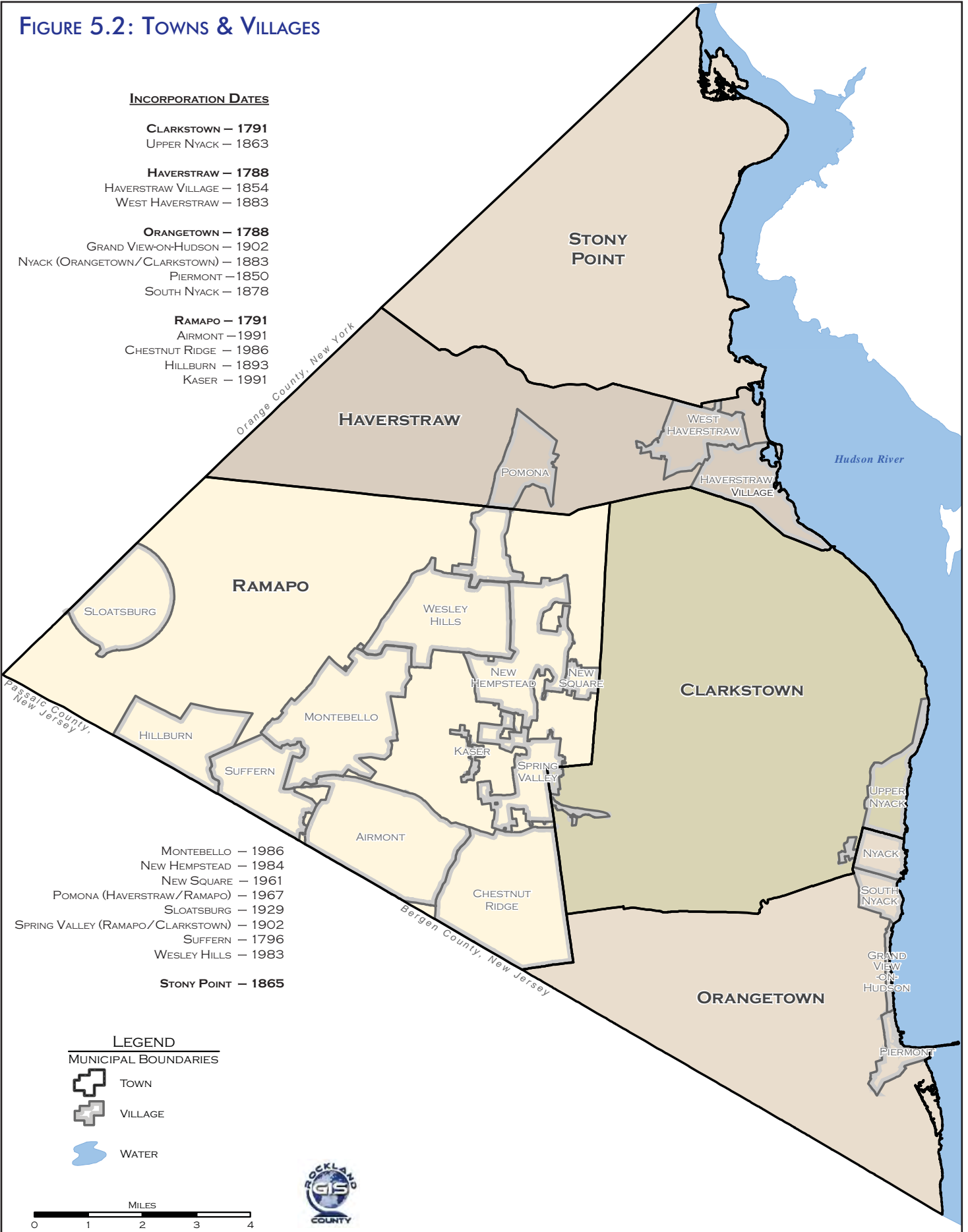
INCORPORATION DATES

CLARKSTOWN – 1791
UPPER NYACK – 1863

HAVERSTRAW – 1788
HAVERSTRAW VILLAGE – 1854
WEST HAVERSTRAW – 1883

ORANGETOWN – 1788
GRAND VIEW-ON-HUDSON – 1902
NYACK (ORANGETOWN/CLARKSTOWN) – 1883
PIERMONT – 1850
SOUTH NYACK – 1878

RAMAPO – 1791
AIRMONT – 1991
CHESTNUT RIDGE – 1986
HILLBURN – 1893
KASER – 1991



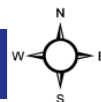
MONTEBELLO – 1986
NEW HEMPSTEAD – 1984
NEW SQUARE – 1961
POMONA (HAVERSTRAW/RAMAPO) – 1967
SLOATSBURG – 1929
SPRING VALLEY (RAMAPO/CLARKSTOWN) – 1902
SUFFERN – 1796
WESLEY HILLS – 1983

STONY POINT – 1865

LEGEND

MUNICIPAL BOUNDARIES

- TOWN
- VILLAGE
- WATER



There are several land-use issues facing Clarkstown. One relates to the proposed replacement of the Tappan Zee Bridge and the development of a new public transportation network associated with the new bridge. Another issue centers around the Palisades Center and the resulting economic impacts from the retail center on older commercial areas, such as the Nanuet Mall – which has been the subject of several redevelopment plans in recent years. Appropriate public transportation to the Nanuet Mall should be part of any future redevelopment proposals. Traffic and circulation for the Palisades Center are also issues, and the Town has started to address them by the redesign of key locations in the ring road. Finally, the Town’s comprehensive plan has recognized the necessity of providing affordable senior housing for its growing elderly population. In 2007, the Town adopted a floating zone, the Adult Active Residential (AAR) zone, to facilitate the development of age 55+ restricted housing across the economic spectrum. The need for affordable housing for middle-income households was also noted in the plan; a 2007 study showed that in no area of Clarkstown was a median sales price house affordable to households earning between 80% and 120% of the Area Median Family Income. The Town has identified as key issues development of work-force housing, potential redevelopment of commercial and light industrial uses, and the need for improved coordination of enforcement of stream buffers. In addition, Clarkstown plans to conduct a study of all State corridors (Routes 9W, 59, 303, and 304) as part of the second phase of its Comprehensive Transportation Plan, a study examining transportation, land use and zoning along these roads.

Haverstraw

The Town of Haverstraw, bordered by Clarkstown and Ramapo to the south and Stony Point to the north, stretches between the Hudson River and Harriman State Park. The town has a wide range of land uses, from more industrial riverfront uses to the dense, traditional mixed uses in the Village of Haverstraw, to the low-density residential uses in the central and western portions of the town. With more than half of the town’s land area devoted to open space, several large parks help to define Haverstraw: Harriman State park to the west, High Tor State Park and South Mountain Park (County) to the south, Bowline Point Park (Town) and Haverstraw Bay Park (County) on the Hudson and Cheesecote Mountain (Town) to the west on the town’s northern border.



New condominium development in Haverstraw takes advantage of the Hudson River views.

Source: BFJ Planning, 2009

Haverstraw is home to three villages: Haverstraw, Pomona (partly located in Ramapo) and West Haverstraw. The town also has the most diverse housing stock in the county, with a mix of housing types ranging from single-family residences to multifamily dwellings. Affordable housing options are primarily concentrated in the Village of Haverstraw, which has adopted a Residential Inclusionary Zone (RIZ) for affordable housing.

Haverstraw has a strong industrial heritage stemming from the brick works and industrial mill operations that flourished in the 19th Century, and remnants of that industrial past are evident today along the Hudson River. The growth of the Route 9W corridor has resulted in the Town of Haverstraw becoming

the main commercial center in northern Rockland, though it still has a relatively low percentage of commercial land overall, and has no regional commercial uses.

Major vacant areas in Haverstraw are found adjacent to Harriman State Park, along Route 9W and portions of the riverfront, but some specific parcels most likely to be developed are located along the town's northern and southern borders: Letchworth Village, a former institution for the developmentally disabled adjoining Stony Point, and the former sand and gravel parcel that straddles the Haverstraw/Ramapo town line. The riverfront presents significant opportunities for Haverstraw's revitalization, especially with the existence of the Haverstraw-Ossining ferry service. The Village of Haverstraw's historic housing stock and river views could provide a basis for improved recreational, cultural and new housing options, given that historic houses are ideal candidates for adaptive reuse as cultural centers or moderate-density housing.

Constraining issues in the town include the ongoing presence of waterfront industry – which, while important to the Town's economic development strategy, can affect future redevelopment of the waterfront and impede public access to the Hudson River – and the challenge of providing ways to safely connect isolated commercial and multifamily housing uses. Other issues facing the town and its villages include the need for drainage and maintenance improvements along Routes 9W and 202, improving circulation in the Route 9W/Route 202/Gurnee Avenue area, providing tourist attractions focusing on the river in both existing parks and new facilities, and the protection of large tracts of land currently used as catering/picnic facilities, camps, or golf courses. The Town has also cited the need for improving pedestrian safety by providing additional sidewalks, crosswalks, and bike lanes, as well as bus stops/shelters and bus pull-offs, so that buses can more safely board and discharge passengers along busy corridors. The Town supports the County's long-term plan to move to fixed-bus stop facilities, which will also improve safety. The Town has also indicated a need for a complete interchange at the Palisades Interstate Parkway/Route 202 intersection to serve planned growth in the Mount Ivy area.



Blue Hill Office Plaza in Pearl River contains the county's tallest building.

Source: BFJ Planning, 2009

Orangetown

Orangetown, located in the southeastern corner of the county, consists of four incorporated villages – Nyack, South Nyack, Grand View and Piermont – and a number of hamlets including Tappan and Blauvelt (two of the oldest hamlets in the United States), as well as Orangeburg, Sparkill, Palisades, and Pearl River. The town's largest single land use is single-family residential, although more than one-fifth of its total land area is devoted to parks or open space, including Blauvelt and Tallman Mountain State Parks and the County-owned Clausland Mountain Park. Piermont Marsh, a freshwater wetland, is located in Tallman Mountain State Park on the southern border of the Village of Piermont. Some of the oldest villages in the County are located in Orangetown, along the Hudson River, providing it with a number of traditional mixed-use centers that draw both residents and tourists from the region. The adjacency of these villages to the Hudson River has greatly contributed to the natural, cultural, scenic, and historic resources available to their residents, small business owners, and tourists.

Orangetown also contains a number of office and commercial areas due to its attractive location along the New Jersey border and the presence of major commercial corridors, Routes 303 and 304. The Blue Hill Plaza office park in Pearl River contains Rockland’s tallest building, while the Rockland Corporate Park and commercial areas along Route 303 are home to a number of businesses. Another major corporate tract, the Pfizer campus (formerly Wyeth), contains the county’s largest private-sector employer.

Orangetown is noted for its concentration of colleges, including Dominican College, Nyack College and St. Thomas Aquinas College, as well as graduate programs of Iona College, Long Island University and Lamont-Doherty Earth Observatory (Columbia University), an internationally known research facility.

One of the most significant issues facing Orangetown, as discussed throughout this Plan, is the future of the Tappan Zee Bridge, and the potential impacts resulting from its replacement and proposed improvements to the I-87/287 corridor (**see Chapter 6.0: Transportation**). Other major issues include the future of large tracts of potentially redevelopable land, such as the former Rockland Psychiatric Center property and the 550-acre Pfizer campus. The growth potential of the Route 303 corridor and the Palisades Interstate Parkway interchange area at Exit 5 will also need to be addressed. In addition, the Town has expressed a desire for “smart fiscal growth” – infill development of existing centers, designed to enhance amenities and accommodate seniors. Many of the major transportation and environmental issues facing Orangetown extend beyond its borders, and addressing them will involve coordination with neighboring municipalities and the County.

Ramapo

The Town of Ramapo lies along the southwestern edge of Rockland County and is the county’s most populated town. Of the County’s five towns, Ramapo contains the highest number of incorporated villages (see Figure 6.2). These incorporated areas range from compact, traditional, transit-served villages such as Spring Valley and Suffern, to newer, less dense areas with large-lot zoning, such as Montebello, Pomona and Wesley Hills. Two villages, Spring Valley and Pomona, are partially located in Ramapo and partially in other towns.



Downtown Suffern, a traditional Rockland County village.

Source: BFJ Planning, 2009

Nearly a third of Ramapo’s total land area is devoted to parks or open space, with the majority located in the town’s western portion (Harriman State Park). Roughly the same percentage of land contains single-family residential uses, but most of this housing is located in the eastern half of Ramapo, which also contains several clusters of multi-family residential uses. This land use pattern results in the town’s eastern portion being more developed, while the western part is largely rural and contains a significant amount of vacant land and open space. In fact, Ramapo has at least twice the amount of vacant land, as a percentage of the total, as any of the other towns in the county, and therefore faces potential substantial growth in the future. The town is also home to two of Rockland County’s largest institutional

uses: Rockland Community College and the County's Dr. Robert L. Yeager Health Center, as well as Good Samaritan Hospital.

Ramapo was, and continues to be, shaped by transportation factors. The Ramapo Pass, the historic route through the Ramapo Mountains, is still a key corridor, carrying Route 17 and the NYS Thruway as well as freight and passenger rail lines. This area could be subject to future development as a result of proposed access improvements related to the Tappan Zee Bridge replacement, and from potential plans to create direct rail access to Stewart International Airport in Newburgh. The Town has indicated a need for improved safety, access, and parking at the Suffern train station, and a complete interchange at the Palisades Interstate Parkway/Route 202 intersection to serve planned growth in the Mount Ivy area.

Ramapo's rapid pace of development in recent years has highlighted the need to balance such development with infrastructure constraints and open space preservation. Many of the vacant and underutilized parcels with infill development potential are located along the Route 202 corridor, and contain environmentally sensitive features such as wetlands and steep slopes, which may limit development options. The presence of the Ramapo-Mahwah sole-source aquifer, which provides much of Rockland County's water supply, and scenic and environmentally constrained areas along portions of Route 202, create further limitations on development because of potential added layers of environmental review, such as Environmental Protection Agency (EPA) review of any project within the designated sole-source aquifer area that will receive Federal financial assistance.

Given these development constraints, Ramapo's future land use plan suggests an overall growth pattern of the highest density located in Monsey (around Route 59), and a concentration of commercial development along the Route 202 corridor in Pomona. The future land use plan also states that the Town will require applicants to provide reports from a licensed professional engineer certifying that sufficient water and sewer capacity exists for proposed developments. The future of large undeveloped tracts of land should also be evaluated, with careful consideration of existing infrastructure capacity. Ramapo's comprehensive plan recommends cluster development in a number of sites. Existing village centers such as Spring Valley, Suffern, and Sloatsburg should be reinforced and given priority for infill development and redevelopment. Some potential redevelopment sites include the former Tilcon quarry and the Off-Track Betting building in Suffern.

With 12 separate villages located within its borders, much of the land area within Ramapo is not under the Town's control, and subject to the jurisdiction of villages with differing objectives and approaches to land use and planning, but often with similar needs. While most of the villages have not adopted individual comprehensive plans, the villages of Montebello, Sloatsburg, and Suffern have developed plans with specific land use goals. The County Comprehensive Plan is intended to complement these - and any other municipal plans - and not to override local land use authority.

Stony Point

The most rural of Rockland County's five towns, Stony Point is located in the northernmost portion of the county, bordering the Hudson River and Orange County, and is the only town that does not contain incorporated villages. A full two-thirds of Stony Point's land area is devoted to parks and open space, including the Stony Point Battlefield State Historic Site, and Bear Mountain and Harriman State Parks. Iona Island, one of two freshwater wetlands in Rockland County, is also located within the town in Bear Mountain State Park. Stony Point contains very little medium-density or multifamily housing, and has a limited commercial area that exists along the southern portion of Route 9W. This commercial development tapers off heading north on Route 9W past Main Street, partially due to the topography, which becomes more steeply sloped.



View of the Hudson Riverfront looking south from Stony Point Battlefield State Historic Site.

Source: BFJ Planning, 2009

Large areas of vacant land in Stony Point are situated in its south-central portion, between the State parkland to the west and the Patriot Hills Golf Course to the east, and in several areas near the Hudson Riverfront. Much of this vacant land contains steep slopes and other environmentally sensitive areas, which both limit their development potential and require greater protection. Recognizing this, the Town has recommended special regulations for development in steep slope areas, and revised its zoning law for specific key development sites to require a minimum lot size of five acres for residential development.

Some key issues facing Stony Point concern vacant industrial sites on or near the Hudson Riverfront and vacant commercial sites in the town's retail corridor. The former Mirant Lovett Generating Station in Tomkins Cove was shut down in 2008 and largely demolished by 2009, although some environmental cleanup issues remain. In early 2010, the US Gypsum Company closed its wallboard manufacturing plant in Grassy Point as demand for its product fell with the national housing market. While vacant industrial sites present opportunities for mixed-use or recreational waterfront development, this potential must be balanced with the need to replace the lost employers and maintain those jobs.

Another major issue in Stony Point is the future of three significant parcels: United Water's Ambrey Pond property depending on the future of the proposed desalination plant in Haverstraw (**see Chapter 12.0: Infrastructure**); the Tilcon site, and the Letchworth Village property, though most of that site's undeveloped portions are located in Haverstraw. The Town of Stony Point purchased a portion of the Letchworth property and converted it into Patriot Hills Golf Course, and reserved the remainder for municipal and nonprofit purposes. Stony Point should work with Haverstraw on the reuse of the Letchworth Village property and its historic buildings, seeking uses that return the buildings to the tax

rolls. In addition, development of the Girl Scout and Boy Scout camps located west of Stony Point State Park could be an issue if these properties are ever sold. Stony Point also intends to update its comprehensive plan, subject to available funding.

5.3 Land Use Controls

The primary tools for controlling or implementing any plans to change land use are zoning and subdivision regulations. These governmental powers are not under the direct control of Rockland County due to the home-rule provisions of the State enabling legislation, but a discussion of county-wide zoning is useful because of the County's role in reviewing site plans, subdivisions, variances, zone changes, zoning code amendments, special permits and other local actions under the State-mandated General Municipal Law (GML) application process. Under Section 239 of the GML, development proposals that require action by a municipal board, planning board or zoning board of appeals and are within 500 feet of a County stream, municipal boundary, the Long Path, or an existing or proposed State or County road, park, or facility, require referral to the County Planning Commissioner.

Zoning in the county is regulated by some two-dozen distinct codes, ranging from small villages with few zoning districts to larger municipalities with many zones. Because of this wide variation in zoning, significant differences can exist in how each local government addresses, for example, density requirements, setback rules, and treatment of environmentally sensitive areas.

In recent years, many zoning codes have evolved to include newer and more specialized techniques to allow for greater flexibility, protect environmentally sensitive lands, and use more creative approaches to plan for development. Planned Unit Developments (PUDs), for example, can provide for a varied approach to applying the zoning code to specific tracts of land, allowing for more variability in the permitted uses and placement of buildings on the site and for relaxation of some development standards. PUDs are often "floating zones" applied on a case-by-case basis to large parcels as they become available for development.

Another zoning tool that can address special land use needs is the use of overlay zones. These zones, which are imposed over existing zoning districts, provide additional layers of control to tackle such issues as historic preservation, economic development, protection of environmentally sensitive areas, conservation of floodplains and senior housing initiatives.

Other specialized zoning regulations include mixed-use zoning, which aims to encourage higher-density, more pedestrian-focused and often transit-oriented development; agricultural zoning, which seeks to protect agricultural land resources from the pressure of urbanization; and inclusionary zoning, which is meant to foster the construction of affordable housing. Examples of these specialized zones exist throughout Rockland County. The Town of Orangetown has designated several historic districts, the Village of Sloatsburg has adopted a ridge protection overlay district, the Village of Haverstraw has a Mountain Protection Overlay Zone, and the Town of Clarkstown has an Active Adult Residential (AAR) floating zone district to encourage senior housing facilities.

It should be noted here that a municipality's power over land use and zoning decisions is not absolute; local authority is, in certain cases, subject to Federal statute. For example, the Federal Telecommunications Act of 1996 restricts local land use control over the allowance and placement of

wireless telecommunications facilities. In addition, the land use provision of the Religious Land Use and Institutionalized Persons Act of 2000 (RLUIPA) protects religious landowners against burdensome and discriminatory zoning codes that could be perceived to restrict their freedom to worship and would, therefore, be subject to constitutional challenge under the Free Exercise Clause of the First Amendment. Municipal zoning authorities should thus remain cognizant of this federal statute when drafting new zoning or subdivision codes; revising existing ones; or reviewing applications for buildings, structures and uses.

RLUIPA provides that a government (municipality), when reviewing a land use action submitted by a religious institution, must do so in a way that does not impose a “substantial burden on the religious exercise of a person” unless the government (municipality) demonstrates that the imposition of the burden is both “in furtherance of a compelling governmental interest” and uses the “least restrictive means” of furthering that interest.

Figure 5.3 presents a generalized zoning map of Rockland County, based on data obtained by the Rockland County Department of Planning (from municipal zoning maps and resolutions). The generalized countywide zoning map is not a County official map.

5.4 Build-Out Analysis

In 2007, the Rockland County Department of Planning launched a residential build-out analysis designed to provide a general estimation of the future residential growth potential in the County consistent with the existing zoning and development patterns. The analysis began by identifying a set of development constraints – existing structures, parks and institutions, water bodies, steep slopes, and wetlands – and applying them to the existing developable land to ascertain the theoretical build-out potential.

The finalized analysis estimates there to be potentially 17,948 additional housing units to be developed based on current zoning and constraints. The results of this build-out analysis are shown in Figure 5.4. As the figure illustrates, the areas with greatest build-out potential include western portions of Ramapo (including the Village of Sloatsburg), Stony Point, the Village of Pomona, the central and western portions of Orangetown, and the Village of Chestnut Ridge.

In any residential build-out analysis, it is important to note that the results are theoretical, and that any future development is contingent on a variety of factors including the availability of land and the local economy. The build-out analysis is a potential saturation point scenario that assumes all of the undeveloped residentially zoned land in Rockland County is actually developed; this information is a guide and does not suggest actual, or desired, building levels. In fact, it is highly unlikely that a full build-out would occur in the foreseeable future, as remaining land tends to be less desirable in terms of ease and cost of development because of such limiting elements as wetlands, floodplains and steep slopes, multiple ownership, varying estate issues and a lack of land actually for sale. For more accurate and realistic growth projections, a number of factors should be examined such as population forecasts, household size estimates and economic growth opportunities.

FIGURE 5.3: GENERALIZED ZONING MAP

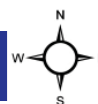
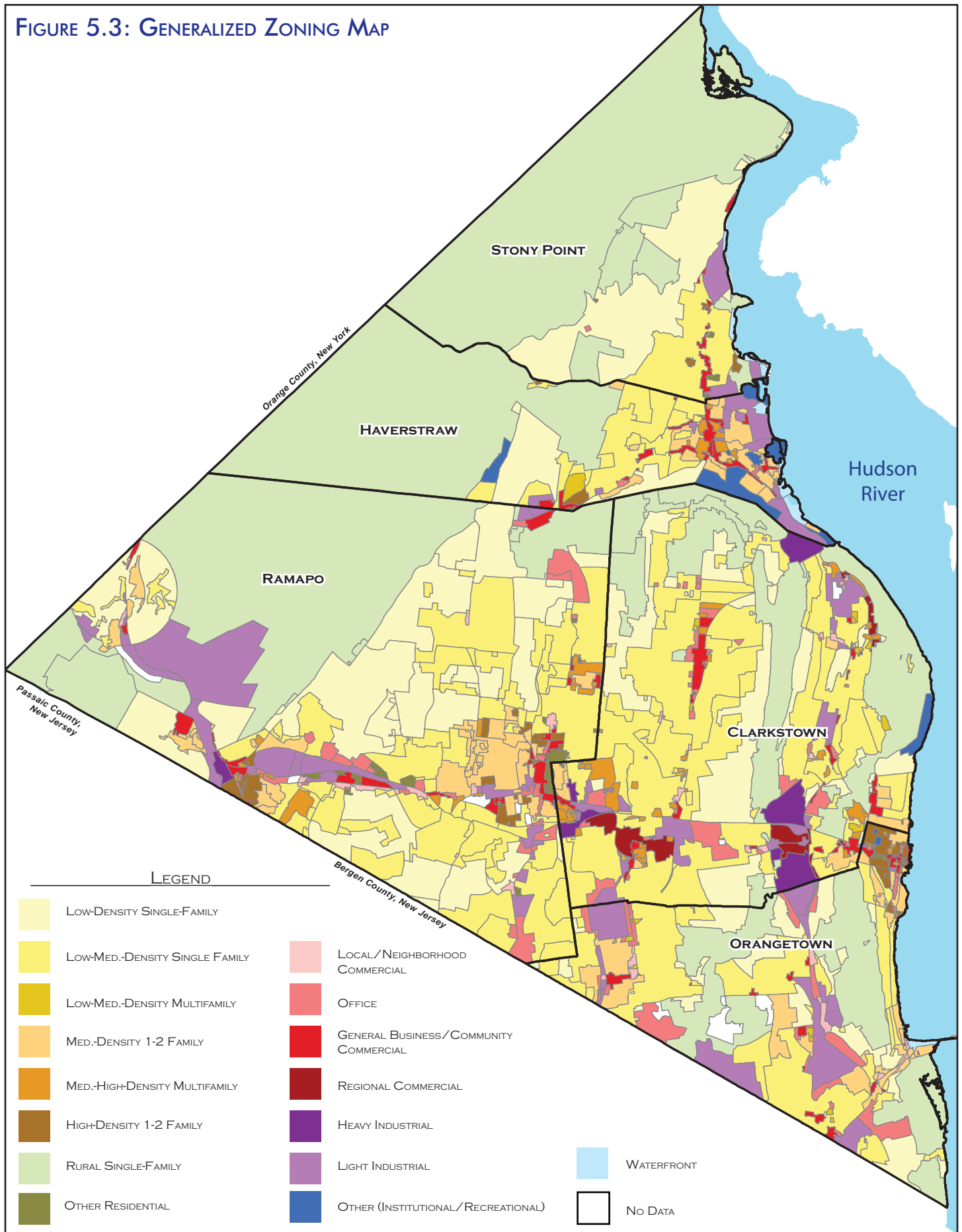
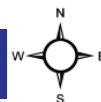
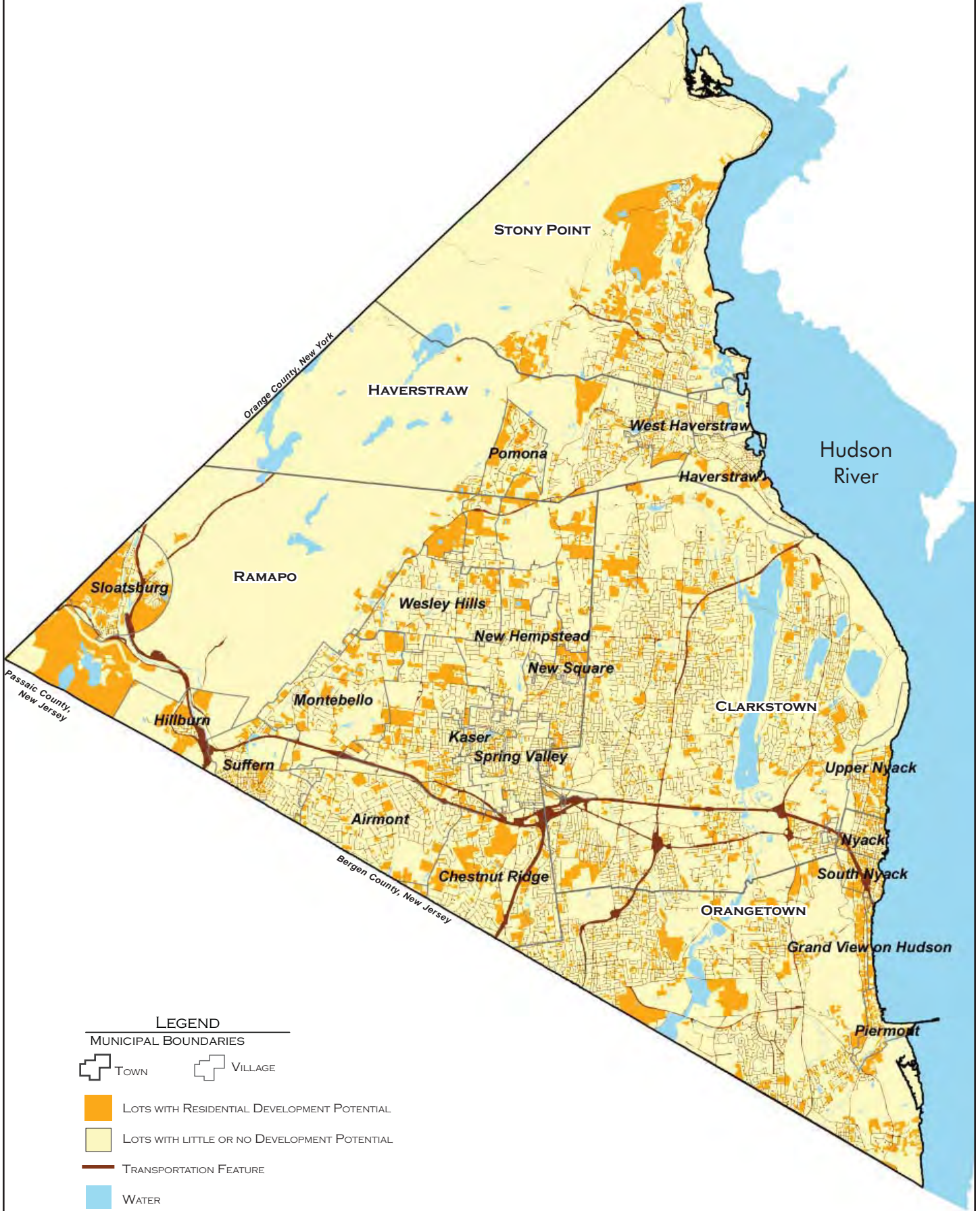


FIGURE 5.4: BUILD-OUT ANALYSIS



5.5 Issues and Recommendations

Many of the land use decisions in Rockland County are made by the towns and villages, and are not under the direct purview of the County. However, as discussed above, the County does have a role in reviewing site plans, subdivisions, variances, zone changes, zoning code amendments, special permits and other local land use actions under Section 239 of the New York State GML. Other County agencies also take part in local land use approvals, such as the Rockland County Drainage Agency, which reviews all subdivisions for compliance with the Rockland County Stream Control Act, and the Rockland County Health Department, which issues permits for certain uses and for new or expanded wells. The County should take the lead on regional land use issues and on activities involving County-owned property, while encouraging its municipalities to take appropriate local actions to address land use issues affecting their communities.

Recommendation #1: Concentrate Growth in Existing Centers

Much of Rockland County's community character and cultural amenities are concentrated in its village and hamlet centers. These centers are largely served by existing water and sewer lines, and in some cases bus or rail transit, making them ideal locations for multifamily housing, municipal uses, and small businesses. However, recent economic conditions have created commercial weakness in several of the county's historic downtown centers, resulting in high levels of vacancy. The County should encourage investment in its centers by:

- **Promoting a mix of uses including office, retail, and residential.** Multifamily residential uses are appropriate in downtown areas and can bring spending power that supports businesses and cultural uses. This type of housing typically produces very few school children, and therefore usually generates positive tax impacts. Multifamily housing is also ideal for seniors and young adults, two sectors of Rockland's population that are in need of more housing options. Focusing limited growth and infill development within existing centers helps to preserve the character of low-density, rural, and open space areas elsewhere in the county. It can also lead to a more efficient use of infrastructure – especially water and sewer systems – reduced traffic congestion and improvements in air quality. By channeling investment into the centers, the County can provide developers with a clear understanding of where growth is desired and appropriate.
- **Identifying brownfields and greyfields.** Several tools and strategies are available to facilitate infill development in Rockland's existing centers. A useful first step is often to identify brownfields and greyfields for potential redevelopment. Brownfields are defined as properties that are "unused, underutilized, or difficult to sell due to known or suspected environmental contamination," while greyfields include "abandoned or underutilized shopping centers, strip malls, and other areas with extensive paved surfaces."¹ Unlike brownfields, greyfields typically do not require remediation and are often excellent candidates for redevelopment. However, a number of brownfields throughout the Hudson River Valley have been successfully remediated and returned to productive use. The New York State (NYS) Department of State's (DOS) Brownfield Opportunity Areas (BOA) program provides technical and financial assistance (up to 90% of the eligible project cost) to municipalities (including counties) and community

¹ Eisenman, T., J. Anzevino, S. Rosenberg, and S. Spector (eds.) *Revitalizing Hudson Riverfronts: Illustrated Conservation & Development Strategies for Creating Healthy, Prosperous Communities*. Scenic Hudson, Poughkeepsie, NY. Scenic Hudson, Inc., 2010.

organizations. Funding can be used to craft revitalization plans and implementation strategies for areas affected by the presence of brownfield sites. In cooperation with affected municipalities, Rockland County will seek to identify infill brownfield and greyfield sites for potential redevelopment, using the BOA program and other State initiatives as appropriate.

In addition to brownfields and greyfields, a number of Environmental Protection Agency (EPA) and New York State Department of Environmental Conservation (DEC) Superfund sites exist in Rockland County, in various stages of site cleanup. The County and its municipalities should continue to work with the EPA, the State DEC, and property owners, as appropriate, to bring these sites back into functional use.

- **Adaptive reuse of older historic and industrial buildings.** Another strategy for targeted infill development is adaptive reuse of older historic and industrial buildings, which allows the architectural details to be retained while the buildings are put to a productive use. The NYS DOS's Division of Coastal Resources has published a guidebook, *Opportunities Waiting to Happen*, which outlines a process to assist communities redevelop abandoned buildings².
- **Upgrading the infrastructure and amenities** of Rockland's existing centers – including lighting, sidewalks, street furniture, bike lanes, shade trees, and utilities – should be a priority for the County and its municipalities. The New York Main Street program, administered by the State Office of Community Renewal, provides funding and technical assistance to communities to strengthen the economic vitality of their traditional main streets and neighborhoods. The grant program supplies funds from the New York State Housing Trust Fund Corporation (HTFC) to business improvement districts and other not-for-profit organizations working to revitalize historic downtowns, mixed-use commercial districts, and village centers. Grants have been used for façade renovations, interior residential building upgrades, and streetscape enhancements; funds are not available for new construction. While such programs are usually initiated at the local level, the County should provide technical assistance to towns and villages wishing to upgrade their downtown areas.

Recommendation #2: Preserve Existing Commercial and Industrial Areas

As noted in **Chapter 11.0, Economic Development**, and discussed at a public workshop for this Comprehensive Plan, Rockland County has recently experienced a trend toward conversion of non-residentially zoned land to residential use. These conversions – together with zoning, parcel size, and other restrictions – effectively reduce the inventory of land available for productive commercial and industrial use. Rockland's commercial and industrial uses are critical to its economic base, foster job growth, and – unlike traditional single-family developments – create a net tax benefit largely because they do not produce school children.

The County does not have zoning or other land use regulating authority, and thus cannot directly prevent the conversion of commercial and industrial areas to residential use. However, working with the Rockland Economic Development Corporation (REDC), the Industrial Development Agency (IDA), and the Rockland Business Association (RBA), the County should identify prime candidate sites for attracting major commercial and industrial users, and encourage the affected municipalities to maintain the non-residential development potential for these sites through appropriate land use regulations. The county's three economic development entities discussed above could then actively market those sites for potential users.

² The guidebook is available at nyswaterfronts.com/communities_abandonedbuildings.asp.

Recommendation #3: Protect Rockland County’s Existing Character and Quality of Life

Rockland County is known for its semi-rural setting, its natural resources and preserved open space, and – perhaps most of all – its location along the Hudson River, a major regional resource for tourism, recreation, and scenic beauty. A key priority in future land use is the conservation of the county’s environmentally sensitive areas and the acquisition of open space. The County should work with the towns and villages to facilitate zoning regulations that protect these sensitive areas, and continue its efforts in targeted open space acquisition – particularly for parcels contiguous to park and open space areas – while encouraging the municipalities to preserve open space on a local level. **See Chapter 7.0, *Natural & Environmental Resources*, and Chapter 8.0, *Parks & Open Space***, for further discussion.

Recommendation #4: Promote Conservation Subdivision Design to Preserve Open Space and Sensitive Areas

As detailed in **Chapter 10.0, *Housing***, the amount of land available for new single-family developments in Rockland County is limited, yet the number of building permits for single-family homes continues to significantly outpace that of all other residential structures. This situation presents a challenge for Rockland in its desire to preserve as much remaining land as possible for open space and recreation, while not completely restricting traditional subdivision development.

One approach to this challenge is the technique known as conservation (or cluster) development, the arrangement of residential properties on a proposed construction site in order to preserve land for open space and recreation or protect sensitive environmental features. A conservation development law allows for the development of the same number of housing units that would be permitted in a standard subdivision; therefore, density within the “clustered” zone remains the same as that of a standard subdivision. However, unlike many standard subdivisions, a cluster subdivision promotes integrated site design that considers natural features and site topography. It protects environmental resources and minimizes runoff by reducing impervious surface area. The County should encourage municipalities to adopt conservation subdivision laws promoting these types of developments (**see Chapters 8.0 and 10.0** for more detailed discussions).

Recommendation #5: Facilitate Zoning That Encourages Affordable Housing for Seniors, Emergency-Service Volunteers and the Caregiver Work Force

Finding adequate and affordable housing can be a challenge for many of Rockland’s residents, but has proven especially difficult for three segments of the population: seniors, emergency-service volunteers, and the caregiver work force (including nurses, home health aides, and child-care workers). As detailed in **Chapter 10.0**, the County will work with its towns and villages to promote the development of local zoning laws that facilitate development of housing that is affordable to these important groups, whether through overlay or floating zones, tax incentives, “set-asides” of units, or other methods.

Recommendation #6: Foster Intermunicipal Cooperation

Towns and villages do not exist in a vacuum. Their actions at times have far-reaching effects on neighboring municipalities and beyond. As discussed throughout this Plan, many issues in Rockland County transcend municipal boundaries and fully addressing them requires a regional approach. The County will thus encourage intermunicipal communication and cooperation to ensure that land use,

planning, and zoning policies among neighboring towns and villages are regionally-minded and mutually beneficial.

As part of this collaborative effort, the County should coordinate and integrate transportation and land use planning on all scales. Regional transportation projects have a significant potential to affect land use in local communities, often negatively so. In addition, land use and transportation decisions must respond not only to existing conditions but to future needs and demands of the County as well. The County will continue to advocate, through communication and cooperation with regional transit providers, for the interests of its towns and villages – as well as all County residents – in the planning and implementation of major transportation projects in the pipeline.

